



3 1761 11850060 2

GOVT PUBNS



Ontario

ROYAL COMMISSION OF INQUIRY INTO CERTAIN
DEATHS AT THE HOSPITAL FOR SICK CHILDREN AND
RELATED MATTERS.

Hearing held
21 floor
180 Dundas Street West
Toronto, Ontario

The Honourable Mr. Justice S.G.M. Grange

Commissioner

P.S.A. Lamak, Q.C.

Counsel

E.A. Cronk

Associate Counsel

Thomas Millar

Administrator

Transcript of evidence
for

June 19, 1984

VOLUME 157

OFFICIAL COURT REPORTERS

Angus, Stonehouse & Co. Ltd.,
14 Carlton Street, 7th Floor,
Toronto, Ontario M5B 1J2

595-1065



ROYAL COMMISSION OF INQUIRY INTO CERTAIN
DEATHS AT THE HOSPITAL FOR SICK CHILDREN
AND RELATED MATTERS

Hearing held on the 21st Floor,
180 Dundas Street West, Toronto,
Ontario, on Tuesday, the 19th
day of June, 1984.

THE HONOURABLE MR. JUSTICE S.G.M. GRANGE - Commissioner
THOMAS MILLAR - Administrator
MURRAY R. ELLIOT - Administrator

APPEARANCES:

P.S.A. LAMEK, Q.C.)	Commission Counsel
E. CRONK)	
D. HUNT)	Counsel for the Attorney
L. CECCHETTO)	General and Solicitor General
		of Ontario (Crown Attorneys
		and Coroner's Office)
M. THOMSON)	Counsel for The Hospital for
P. BATTY)	Sick Children
B. PERCIVAL, Q.C.)	Counsel for The Metropolitan
D. YOUNG)	Toronto Police
W.N. ORTVED		Counsel for numerous Doctors
		at The Hospital for Sick
		Children
F. KITELY		Counsel for the Registered
		Nurses' Association of Ontario
		and 35 Registered Nurses at
		The Hospital for Sick Children
D. BROWN		Counsel for Susan Nelles -
		Nurse

... (Cont'd)



APPEARANCES: (Cont'd)

G.R. STRATHY)	Counsel for Phyllis Trayner -
P. RAE)	Nurse
J.A. OLAH		Counsel for Janet Brownless -
		R.N.A.
S. LABOW		Counsel for Mr. & Mrs. Gosselin,
		Mr. & Mrs. Gionas, Mr. & Mrs.
		Inwood, Mr. & Mrs. Turner, Mr.
		& Mrs. Lutes, and Mr. & Mrs.
		Murphy (parents of deceased
		children)
F.J. SHANAHAN		Counsel for Mr. & Mrs. Dominic
		Lombardo (parents of deceased
		child Stephanie Lombardo); and
		Heather Dawson (mother of
		deceased child Amber Dawson)
J. SHINEHOFT		Counsel for Lorie Pacsai and
		Kevin Garnet (parents of
		deceased child Kevin Pacsai)

VOLUME 157



RD/ko

1

2

--- On commencing at 10:00 a.m.

3

THE COMMISSIONER: Yes, Mr. Hunt.

4

MR. HUNT: Thank you,

5

Mr. Commissioner.

6

MS. CRONK: I am sorry, Mr. Hunt.

7

If I could interrupt for just 22 seconds. You will recall, sir, that we undertook to give to you a copy of several charts that set out, summarize the pharmacological estimates that had been made as to the time and the amount and the likely route of the

11

administration of the dose of digoxin to eight of the 36 children. A bundle of those charts have now been circulated to Counsel and I would ask that it be

13

marked, along with the other materials that were

14

marked, as an exhibit, and as Counsel will see, and as you will see, sir, when you look at it, it covers

16

Justin Cook, Allana Miller, Kristin Inwood, Kevin

17

Pacsai, Janice Estrella, Stephanie Lombardo, Jesse

18

Belanger and Jordan Hines.

19

The charts contain the references from the evidence of all of the pharmacologists where evidence was given by them concerning either the route, the likely amount of the dose and the likely time of the dose.

22

23

Thank you, sir.

24

25



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

THE COMMISSIONER: Yes, all right.
Do you want this as an exhibit?

MS. CRONK: Yes, sir, along with the
materials, if you would.

THE COMMISSIONER: We are 426 now.

MS. CRONK: I think it should be part
of 423, sir.

THE COMMISSIONER: Let's make it part
of 423.

--- ADDITION TO Copy of several charts
 EXHIBIT NO. 423: summarizing pharmacological
 estimates.

THE COMMISSIONER: Yes, all right.
Yes, now, Mr. Hunt.

ARGUMENT BY MR. HUNT:

Thank you, sir. I will bring you some
happy news right off the bat this morning and that is
that I don't think Ms. Cecchetto and I are going to
take nearly as long as our estimate to you of half a
day or slightly less than half a day.

THE COMMISSIONER: I won't agree with
you, because if I do you will take offense.

MR. HUNT: Sir, if I could commence by
joining in a commendation that has been given to you by
my friends, who have preceded us, and on behalf of all
of the clients we represent, commend you for your

Digitized by the Internet Archive
in 2024 with funding from
University of Toronto



1
2 handling of the Inquiry to date, both with respect to
3 the taking of evidence and the dealing with some of
4 the seemingly intractable problems that have arisen, and
5 it struck me that it may be that only those of us who
6 have actually been here in the eye of the storm, as it
7 were, can truly appreciate what it is that you have
8 accomplished and you have done it, notwithstanding the
9 stress and pressure created by commentators from the
10 outside some, not all of whom, but some of whom have
11 chosen to criticize from their vantage point on the
12 sideline, merely because it was, because it served
13 their own personal motives to do so. I am sure that
14 you have accomplished all of this with no small
15 personal sacrifice and have done so with the knowledge
16 that there is more yet to come in Phase II. Even were
17 this the end of this part of the Inquiry, which it
18 isn't, I say that all of the parties and, indeed, the
19 citizens of the Province owe you a debt of gratitude
20 on behalf of my clients.

21 As a starting point for these
22 submissions we have gone back to what our role in
23 Phase I was and it has been said more than once, sir,
24 during Phase I by you and others that our clients have
25 been here with the full right of participation in
Phase I really because of their interest in Phase II,



1
2 the reasoning being that their conduct in investigating
3 and prosecuting for charges of murder arising out of
4 these deaths will be investigated in Phase II and,
5 therefore, they must have an interest in the evidence
6 as it emerges in Phase I.

7 I can say to you quite frankly that we
8 would not have participated in Phase I to the extent
9 that we had, that we did, rather, had certain theories
10 not been advanced to you to suggest that there were no
11 intentional killings that took place at the Hospital
12 for Sick Children. That position, quite candidly, is
13 one that is not acceptable to our clients and it is
14 not because of their position on Phase II, but it is
15 because we represent clients who have great experience
16 in dealing with evidence, both circumstantial and
17 direct evidence of crime, and those clients that
18 have put thousands of hours into studying the evidence
19 on this case in order to discharge their various
20 responsibilities and they feel deeply convinced that
21 there were babies, a number of babies murdered at the
22 Hospital for Sick Children. That is why we have
23 become involved to the extent that we have.

24 There is no question that this case
25 presents a number of unique difficulties for anyone
who attempts to analyze the evidence and that is



1
2 notwithstanding what area of experience lies behind a
3 particular vantage point of the analyst, but I submit
4 to you, sir, that there is simply too much
5 circumstantial evidence in this case that points to
6 murder to allow anyone to simply, as it were, put their
7 head in the sand and say "Let's wait for future
8 medical scientists to try to solve this puzzle."

9 I submit to you the time to draw the
10 bottom line on these events is right now and you are
11 the person to do that, as a Judge, experienced in
12 assessing and weighing all quality and manner of
13 circumstantial evidence and, in my submission, you
14 are the person to draw that bottom line.

15 Now, I plan to deal with some of the
16 submissions advanced by Mr. Scott to you, both with
17 respect to the approach you ought to take to the
18 evidence and with respect to the findings or non-
19 findings that he suggests you ought to make. I plan,
20 as well, to deal with the submissions of Mr. Lamek,
21 insofar as he categorizes the 36 deaths, and I can
22 tell you right now that we do not disagree, in any
23 major way, in the manner in which Mr. Lamek has
24 categorized the deaths. There are certain differences
25 of opinion and I will touch generally on them.

Miss Cecchetto will deal more



1
2 specifically with some of the medical and pharma-
3 cological evidence relating to some of the deaths,
4 but again I suggest that we don't disagree to any
5 major extent to the submissions made to you by
6 Miss Cronk with respect to those.

7 I intend to begin by making some
8 comments with respect to Mr. Scott's submissions to
9 you about your approach to the issue that you have to
10 decide.

11 Now, I can see at once that
12 Mr. Scott's argument was thorough, exhaustive and
13 certainly persuasive, and I mean no disrespect to
14 him, but I suggest to you, firstly, it is not new and
15 it is not unique and it is even predictable to suggest
16 that one deal with a circumstantial case by isolating
17 the individual pieces of evidence and trying to deal
18 with them uniquely and separately, as opposed to
19 cumulative. Essentially that is the argument that is
20 submitted to the trier of fact by anyone who is
21 defending against a proposition that is proved by
22 circumstantial evidence.

23 Certainly in my experience in the
24 criminal area that is an argument that is made to
25 judges and juries in every criminal case where
circumstantial evidence is advanced and certainly is



1
2 the majority of cases, in my experience, in which
3 circumstantial evidence is advanced.

4 Mr. Scott's proposition to you
5 essentially is this: It is a circumstantial case that
6 we are dealing with and you must treat each case, that
7 is each death, as a unique and individual incident to
8 be examined.
9

10 - - - -
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25



B-1

JR/hw

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

And then goes father and he says take each piece of circumstantial evidence and assess it individually to see if it comes up to a particular standard which he suggests is a balance of probabilities or, at least a standard of reasonable assurance. And you do that with each piece of evidence and measure it against that standard to determine where it fits in in terms of categorizing the deaths.

Now, it even goes one step further than that. He says when you do that with each piece of circumstantial evidence with a scientist's hat, as opposed to a judges gown, and that is going to lead you in his submissions to do certain things.

First of all, he says you will only accept as reliable evidence, evidence of levels of digoxin that is in serum or fresh frozen tissue.

Secondly, you will have to approach each piece of evidence separately and approaching it as a scientist you will classify as unsafe any evidence about which there is scientific experts disagree, so if there is a disagreement you will ignore it.

Thirdly, you will ignore the common threads and patterns that run throughout the evidence; and fourthly, you will demand toxicological evidence before you conclude that a baby died of digoxin



B-2

1
2 intoxication or before you conclude foul play was
3 involved.

4 So, out of his basic submissions to
5 you that you approach each death individually and each
6 piece of circumstantial evidence individually, as
7 a scientist, those four limitations, he suggest to you im-
8 pose upon yourself. And, in essence, I suggest, Mr. Scott
9 is saying to you that approaching this problem that
10 you have to face as a scientist and feeling appropriately
11 intimidated and constrained by the scientific
12 community that is going to be looking over your
13 shoulder. You will then only act on direct evidence
14 which is contradictory, by any means. That is, in
15 essence, his submission. Because science will not
16 admit of circumstantial proof and, therefore, you,
17 sir, are admonished by him to ignore it as being
18 unsound.

19 Now, I caution you, sir, that ignoring
20 circumstantial evidence can lead people (and
21 especially scientists) into a lot of difficulty. It
22 can certainly, in my submission, as we have seen,
23 cause scientists to allow a situation to continue
24 for months while they seek solace in purely scientific
25 explanations until finally they are hit by the real
world, as it were, with all the circumstances that it



1
2 contains, and then that leaves them really unable to
3 deal with the consequences of the reality of the
4 situation.

5 Mr. Scott invites you to join him,
6 and the scientists, and he tells you that the view
7 from that particular vantage point is not a bad one.
8 And I say to you that the tragic weakness of that
9 position to you is that it ignores one of the major
10 lessons that we all learn in life and that we all
11 live by... and that is the circumstantial proof of
12 a proposition is quite often better than so called
13 direct proof. In many cases circumstantial proof
14 emerges as the best proof of a proposition.

15 To Mr. Scott's submissions, I say that
16 it is wrong to take each individual piece of
17 circumstantial evidence and to assess it individually
18 to determine if it meets a particular standard. It
19 is wrong, to then conclude that if each piece of
20 circumstantial evidence doesn't meet that standard
21 it is neutral and then of no assistance to you in
22 ultimately drawing inferences.

23 On the approach that he has suggested
24 to you circumstantial evidence will inevitably at the
25 end of the day add up to zero. In my submission,
circumstantial evidence must be tested against the



B-4

1
2 standard... whatever standard that you want to
3 pose, it must be tested against that standard only
4 once and that is accumulatively at the end of the
5 day after all of it has been objectively assessed for
6 credibility, trustworthiness and relevance. But
7 only then, and only once, does one stack up the
8 circumstantial evidence and test it against their
9 standards.

10 In my submission that is common
11 sense. Certainly in criminal area it is certainly
12 more than common sense it, is trite law. In essence
13 I am suggesting to you that you ought to reject Mr.
14 Scott's suggestions as to how you approach the
15 issues.

16 Now, he goes on and he implores you
17 to make any finding at all only in the cases of
18 Cook, Miller and Pacsai and a limited finding in the
19 cases of Lombardo, Belanger and Hines. He says that
20 in all other cases you will find the evidence
21 unsatisfactory, and despite your suspicions that might
22 develop from that evidence, you must simply say,
23 "I don't know how the baby died", and restrict it at
24 that. He goes so far, in Volume 154, page 987, to say that
25 "No one is interested in your opinion and that all you
are here to do is to tell us what we can know. He



1
2 says that there is already suspicion abounding and
3 that you are not here to add to it or continue it.

4 Now, my respectful submissions, Mr.
5 Scott has put too narrow a limit on the purpose of
6 this Royal Commission and upon your function as the
7 Commissioner.

8 You were selected as a Commissioner
9 because you are an experienced judge of facts. You
10 have been trained and you are experienced in weighing
11 facts and drawing inferences and you are also someone
12 that the citizens of this province can look to, to
13 objectively view all sides of the issue and then to
14 give your opinion. And I say, of course people are
15 interested in your opinion. The parents are, the
16 other parties here are, with the exception of those
17 that may feel threatened by your opinion, and the
18 public most assuredly is. If you tell the public
19 after listening to evidence for over a year that
20 comprises all the available evidence, if you tell
21 the public then that you don't know how a baby died
22 but you are suspicious that digoxin may have played
23 a role in the death, to whatever degree you may
24 attach to your suspicion, then that means something,
25 in my submission, to the parties (that is



B-6

1
2 the parents and to the public). It means vastly more
3 than the suspicions that Mr. Scott has alluded to,
4 suspicions that come from media commentators, suspicions
5 that come from individual medical personnel, suspicions
6 that come from family members, that come from the
7 police, that come from Crown Attorneys and that come
8 from the lawyers here representing the parties before
9 you. The reason for that, in my submission, is
10 because you, and you alone, are the only person who
11 is charged with the responsibility of determining
12 what happened. Approach this problem totally
13 impartially with only that objective in mind, and
14 with an open mind, and then consider all the evidence.
15 So, it is important what you think about the deaths.

16
17
18
19
20
21
22
23
24
25



C
MT/pg

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

In my submission you don't have to come to any standard of proof that is normally applied in any criminal or civil proceeding. It is important to the families and the public what you think about the situation, and I submit that the public and the families have a right to hear that. And I go farther and say the credibility of this exercise really depends on you telling the families and the public what you think after hearing and assessing this evidence.

Now the fact that it may upset the medical and administrative personnel at the Hospital for Sick Children and cause morale problems there as Mr. Scott suggested it might be important, but they are professionals. I am sure they will take the appropriate lessons from it, and perhaps they will approach issues in a different way because of it, and we can all be assured that a tragedy such as the one that has occurred is not likely to happen there again.

Now I do not intend to say anything further about Mr. Scott's suggestion as to his approach. Those are the two issues that in my submission caused certainly us the most difficulty accepting, and I will move to our position with respect



1
C-2 2 to how and by what means the 36 babies died.

3 Now, I indicated to you there is no
4 serious disagreement as between us and submissions
5 of Mr. Lamek and Ms. Cronk with respect to that
6 issue. I think it narrows down really to the
7 categorization by Mr. Lamek of five babies. Those
8 are babies Hoos, Turner, Monteith, Adamo, and Fazio.

9 You will recall Mr. Lamek suggested
10 that those are the babies that fell into a category
11 where there was only one or more of the features
12 of the circumstantial evidence that attached to them,
13 and that there was no basis for finding that those
14 deaths were anything other than natural.

15 Our concern with respect to that,
16 sir, is that no parent - it not be suggested to any
17 parent that there is no basis for finding that the
18 death was anything other than natural where there
19 is any basis for being at all suspicious about the
20 death, and in our submission to you there is basis
21 for being suspicious about those deaths, and it may
22 flow from perhaps a higher index of suspicion than
23 we attach to certain of the circumstantial features
24 of this case. I will in a few moments submit to you
25 that those five babies ought to be included in the
category of suspicious deaths.



C-3 1
2 Perhaps if I could just generally and
3 very quickly review Mr. Lamek's categories for you,
4 you will recall that in the category of probable
5 overdose he had eight children: Cook, Miller,
6 Pacsai, Estrella, Hines, Lombardo, Belanger, and
7 Inwood.

8 With respect to baby Onofre Mr. Lamek's
9 submission was that there was a high degree of
10 suspicion for even a probable overdose. So with the
11 possible exception or addition of Onofre that
12 category may move to nine, and we accept Mr. Lamek's
13 submissions; adopt them with respect to those babies
14 and are quite content and in agreement with the way
15 in which he has categorized them.

16 On the other end of the scale you will
17 recall he indicated to you there were a number of
18 babies that you could be satisfied died of natural
19 causes. These were babies Murphy, Floryn, Heyworth,
20 Leith, and Perreault. I believe he added to that
21 baby Volk, for a total of six, and we don't take any
22 issue with respect to that category and adopt Mr.
23 Lamek's submission with respect to the categorization
24 of those deaths.

25 You will recall Mr. Lamek dealt with
baby Lutes and suggested to you that although he would



C-4

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

not rate that baby's death as natural he suggested that it rated very little if any suspicion, and I take that submission not to be one that urges you to come to the conclusion, the parents, the public, that that was a natural death, but it is one that will have a certain element of suspicion attached to it. So I consider that one as one that he has put in the largest category, that being the deaths that have attached to them certain degrees of suspicion.

Into that category Mr. Lamek placed babies Thomas, Gionas, Gardner, Woodcock, Dawson, Gage Warner, Manojlovich, Bilodeau, Taylor, Shrum, Velasquez, McKeil, MacDonald, and Gosselin. And then of course I suggest that in light of Mr. Lamek's submissions baby Lutes is in that category as well, having some degree of suspicion attached to the death. And then depending on how you categorize baby Onofre, he will either be in that category with the high degree suspicion attached or you may find that he probably died of a digoxin overdose.

Now that leaves the babies that I intend to say something about: Hoos, Turner, Monteith, Adamo, and Fazio, which were placed in a somewhat lesser category than the suspicious category.



C-5 1
2 Before I deal with them individually
3 I can say generally in my submission Mr. Lamek has
4 attached a rather low index of suspicion, if I can
5 call it that, to certain non-medical circumstances
6 that arise on the evidence such as patterns of timing,
7 the presence of certain medical personnel, personalities
8 of the medical personnel and certain of the events
9 that occurred on the wards even after the death
10 of Justin Cook.

11 It is our submission to you that those
12 circumstances, the non-medical circumstances are
13 something that you will not only want to ignore but
14 you will want to be ever mindful of them for I submit
15 to you very much can be gleaned from them that is
16 going to assist you in categorizing the deaths one
17 way or another.

18 To go back to the outset, the territory
19 that we have to deal with was self-defining. That
20 is the deaths occurred with such an incredible increase
21 in the number of deaths for that time period that
22 they raise concern of themselves, so we are given
23 the territory that we have to look at.
24
25



1

RD/ko

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

I agree with Mr. Lamek's submission that if taking that territory raises concern of itself you can find in there ranges of medical evidence alone, one death that you are prepared to say was a result of an intentional overdose of digoxin. Then in my submission that fact, there is a death, one death that was intentional becomes the single most important piece of circumstantial evidence that you have to deal with in assessing the rest of the evidence and categorizing the death. In my submission the significance of that finding cannot be understated in any way.

What it means is that in this period of concern was self-defined simply by the deaths, that at some point a deliberate calculating and, in my submission, seriously disturbed killer stalked the halls of the Hospital for Sick Children, was prepared to take human life from at least one totally defenseless and helpless victim. That thought is absolutely horrific and when that unthinkable idea becomes reality and we then have to accept that is what happened, in my submission, the significance of it can simply not be understated in terms of what it means by way of explanation of other deaths within that time period.

The more children that you find on the



1
2 medical evidence alone died as the result of an over-
3 dose of digoxin then the more significance that that
4 piece of circumstantial evidence takes on. The degree
5 of significance, which attaches to the finding that a
6 killer was present and responsible for at least one or
7 more than one of those deaths is this: It then requires
8 more compelling evidence to displace the suspicion that
9 has to attach initially to every death that took place
10 in that period, that by its own self-defining nature,
has given rise to concern.

11 So I agree that it is a question of
12 onus and once you find that there is even one
13 intentional killing in that period then I suggest it
14 requires most compelling evidence and I suggest two
15 things: First of all, suspicion automatically attaches
16 to every other death that you have to deal with and,
17 in order to displace that suspicion, it is going to
18 require the most compelling evidence that the death
was, indeed, a natural death.

19 In my submission to you, you have an
20 exercise that you have to go through if you find that
21 one or more, on medical evidence alone, that one or more
22 than one child died as a result of digoxin overdose, you
23 have an exercise that you have to go through that is
24 not going to culminate in your report and that is you
25



1
2 have to look at the evidence surrounding that death
3 or those deaths that can be more than one and you
4 have to see did, on the evidence, a person or persons
5 responsible for it emerge. I say it is not going to
6 appear in your report, because you are not going to
7 identify that person, if you are able to do it, but
8 it is important that you do it because if you are
9 able to narrow down the killer of any child that you
10 find was killed by an intentional overdose, then the
11 degree of suspicion that attaches to the other deaths,
12 merely from the fact that one of those children was
13 intentionally killed, is going to increase dramatically
14 if that same individual or individuals, if you are able
15 to to your own satisfaction, narrow it down the degree
16 of suspicion that is going to attach to the other
17 deaths is going to increase dramatically if that
18 individual or those individuals are also present at
19 any subsequent death. The evidence then, that is
20 going to be required to displace that suspicion, is
21 going to be even more compelling.

22 I take just an example. If you find
23 on the evidence, medical evidence, that Justin Cook
24 was deliberately killed by an overdose of digoxin,
25 then I say that fact alone is monumental in its
significance in a case of circumstantial evidence.



1
2 That fact alone is going to attach suspicion to the
3 35 other deaths that you have to look at. You are
4 going to have look at the evidence surrounding the
5 death of Justin Cook and attempt to determine, if you
6 can isolate the person or persons responsible, and you
7 are then going to have to assess the evidence of the
8 other deaths, bearing in mind that the presence of any
9 individual that you are able to isolate then increases
10 dramatically and, in my submission, the suspicion that
has to be attached to it.

11 If you find on the basis of medical
12 evidence alone that more than one, more than Justin
13 Cook was killed by an intentional overdose, you are
14 going to have to go through that same exercise with
15 each baby that you find. It may be that only Justin
16 Cook that you will find you are satisfied on the
17 medical evidence was killed by an intentional over-
18 dose, and you may find others. Each time you find
19 them, in my submission, you have to go through the
20 same exercise and if the same familiar face or faces
21 keeps arising, as present in each death, then the
22 significance that you must attach to that, when you
come to examine the other deaths, in my submission,
is considerable.

23 THE COMMISSIONER: It makes the
24
25



1
D 5 2 report unintelligible. It could almost be said it
3 makes it appear dishonest.

4 MR. HUNT: I grappled with that issue.
5 I will give you my suggestion.

6 THE COMMISSIONER: I grappled with
7 it, too, and I reached a very simple-minded solution,
8 but nobody else seemed to like it.

9 MR. HUNT: I appreciate that we didn't
10 seem to.

11 THE COMMISSIONER: You weren't that
12 fond of it either.

13 MR. HUNT: You are going to have to
14 indicate in your report at some point, in my
15 submission, what degree of suspicion the non-medical
16 pieces of circumstantial evidence give rise to in you.
17 In other words, you are going to have to define your
18 own index.

19 THE COMMISSIONER: Assuming that I
20 did find a certain killer, could I even say that one
21 of the reasons that prompted me to reach this
22 conclusion was the presence, caring for the children,
23 of one particular team of nurses? Can I even say
24 that?

25 MR. HUNT: I suppose, in light of all
that has gone on, particularly in light of the



1
2 reasoning in the Court of Appeal, it may not be wise
3 to even say that.

4 THE COMMISSIONER: But you are telling
5 me that I should take it into consideration, but I
6 should not mention it.

7 MR. HUNT: I am saying that you have
8 to take it into consideration, because it is of such
9 critical significance in ultimately coming to a
10 conclusion on how the child died. The one thing that
11 has to be accurately done, despite the problems, is
12 that you have to be satisfied that you have come to
13 the right conclusion about each of the children. So
14 factors such as these, even though you cannot make
15 reference to them, in my submission, you have to
16 entertain them and give them weight.

17 Now, how you report on them is the
18 problem. One way, in which you may want to do it, is
19 to take the non-medical circumstantial evidence to
20 indicate what degree of suspicion it gives rise to
21 in you and then to treat the non-medical circumstantial
22 evidence as one item without breaking it down and
23 defining it by its individual components.

24 THE COMMISSIONER: I should get you
25 to write the report, because that is so obscure. If
I could write like that I might be able to get away



1
D 7 2 with almost anything.

3 MR. HUNT: No. What it does then it
4 allows you to include in your report under the heading,
5 or the component of non-medical circumstantial
6 evidence, the effect that that evidence has had on
7 you by virtue of the degree of suspicion that it gives
8 rise to you, gives rise in you with respect to each
9 death.

10 THE COMMISSIONER: Without saying
11 what it is.

12 MR. HUNT: You can indicate, for
13 example, what you mean when you say the non-medical
14 circumstantial evidence. It includes a number of
15 things. It includes not only the presence of
16 personnel, it includes the timing of the deaths. It
17 includes the significance of other events that took
18 place on the ward. It includes the periods, the
19 significance you attach to the periods, in which
20 nothing occurred.

21 THE COMMISSIONER: I have lost the
22 Court of Appeal Judgment. This word "analyze". I
23 look at this:

24 "The Commissioner is obliged to
25 hear all of the evidence relating
to the cause of the death of the



D 8

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

"children and this would include evidence which tended to show that one or more of them died as a result of unlawful or negligent acts. While the Commissioner must not identify an individual as being legally responsible for a death, he should analyse and report upon all of the evidence with respect to the circumstances of each death ..."

How can I analyze and report upon all of the evidence with respect to the circumstances of each death if I accept your argument that one of the circumstances is the presence of the team, without breaching the first part which says - the second part, here it is - that I cannot name the perpetrator? How could I do it?

MR. HUNT: I am suggesting you do it by treating the non-medical circumstantial evidence as one, after analyzing it yourself, and treating it in your report as one single component that gives rise to a certain degree of suspicion in you and that in reporting on the death you simply indicate what rule the non-medical circumstantial evidence played without breaking it down and trying to attach a degree of



1
2 suspicion to each piece of non-medical circumstantial
3 evidence.

4 For example, baby A. You will deal
5 with the medical evidence, including the clinical
6 pharmacological, toxicological evidence and you will
7 then make reference to non-medical circumstantial
8 evidence that was available without breaking it down
9 and defining it in detail and you will indicate what
10 degree of suspicion that gave rise to in you, again
11 without putting a tag showing what the suspicion
12 level was, depending on the piece, and you will
ultimately come to your conclusion.

13 You will at least accomplish this:
14 You will certainly, in coming to a conclusion,
15 consider all of the relevant evidence, notwithstanding
16 certain of it that you can't.

17
18 - - - -
19
20
21
22
23
24
25



RJR/ko

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

THE COMMISSIONER: I am prepared to do that. I am prepared to consider it, but I need to know too. When I reach a decision I will be able to tell why. And, here, you are as good as telling me - the Court of Appeal have already told me - but you are telling me again that I should coat it some kind of - I don't know - some kind of paint so that people won't really know what it is that has caused me to reach this conclusion; isn't that what you are telling me?

MR. HUNT: Yes. I am taking the Court of Appeal Judgment and doing the best that I can to say to you, here is a suggestion for drawing the line in that gray area where you are required to report on all the circumstances and, yet, not do so in a way that actually affixes somebody with responsibility for the deaths.

I mean, I guess this is where the tire meets the road. We have talked about it since the Judgment and --

THE COMMISSIONER: You say that it is important that I give my opinion. I give my opinion and I say practically - I say to the public that this is my opinion. Sorry, I can't tell you why.

Now, that can't make sense. That is what we are faced with.



1

2

MR. HUNT: It's not quite as bad as ..

3

THE COMMISSIONER: No, no.

4

MR. HUNT: You can't tell them why.

5

You are saying here is why and in this "why" area that

6

we are going to call non-medical circumstantial

7

evidence. I am not going to elaborate on it but I am

8

going to tell you that it did affect my conclusions

9

on this baby. It did give rise to that - that

10

evidence did give rise to suspicion in me that digoxin

11

may have played a part, but I am not going to go

12

through the individual components of that area and

13

tell you how each one gave rise to suspicion in me

14

and we know the reason why. The public knows the

reason why you are prohibited from doing so. It is a

15

case of drawing the line in a gray area.

16

The one thing that I suppose that

17

comes out of it that is important is that in coming

18

to your final conclusions you are certainly considering

19

everything that is relevant and necessary to consider,

20

and you are going as far as you can in reporting on

21

the circumstances without going so far as to affix

22

someone with responsibility for the deaths. And that

23

is all that can be asked of you. It doesn't make for

24

the type of conclusion that you are used to giving

25

but, then, this exercise isn't the usual and ordinary



1
2 exercise.

3 I don't think I can really be of much
4 more assistance to you insofar as suggesting a way in
5 which to draw the line that you have to draw is
6 concerned. I suggest that you do it by not breaking
7 down the non-medical circumstantial evidence only and
8 treat it as one item without defining it in each and
every case.

9 THE COMMISSIONER: Take a censor on
10 staff.

11 MR. HUNT: I suppose the effect of
12 going through the process, trying to identify in your
13 own mind the individual or individuals responsible
14 is going to give rise to another exercise that you
15 will have to perform. And that is if you are able
16 to do that, to narrow down the individual responsible
17 for any death that you find was intentional, you are
18 then going to have to look at the evidence with the
19 view to seeing if there is anything in the evidence
20 that goes to the question of the personality or make-
21 up of that person: To see whether in your mind that is
22 relevant to making it more likely or less likely that
23 that individual could have been responsible for the
24 act that you find was an intentional one. And if that
25 type of evidence is present - and by that, I mean



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

evidence that goes to the personality, the make-up of the individual as present, and it may increase or decrease the suspicion that you will attach to the presence of that person at any other death.

If it increases it, then, in my submission, you will then again require even more compelling evidence to displace the suspicion that you have to attach to any particular death at which that person was present.

The same can be said of the incidents that occurred in August, September and October --

THE COMMISSIONER: All right. Go back to what you were talking about.

MR. HUNT: I'm talking about -- well, there is an overlap. I agree. But I am talking about evidence that relates perhaps more specifically to the personality or make-up of any individual that you narrow it down to.

THE COMMISSIONER: Surely not a name?

MR. HUNT: Well, if you, on reviewing the evidence, are satisfied that you narrow down the list of individuals to one or two -- take for example Baby Cook -- you are satisfied the medical evidence that you have that the baby probably died of an



1
2 intentional overdose, you then look to the evidence
3 surrounding the death to see if you can determine
4 from that who may have been responsible for it. You
5 may not be able to and that ends your exercise. If
6 you can, then, you have to look at all of the evidence
7 and see what was said about that person that may be rele-
8 vant on the question of their personality or their
9 emotional make-up that will increase or decrease the
10 likelihood that such a person could have been
11 responsible for one or more deaths.

12 You may not find the evidence satisfies
13 you, but you may --

14 THE COMMISSIONER: What if I do and I
15 put it in the report? I would think that I would go
16 to jail immediately. You can collect \$200, or whatever
17 it is, or pass go.

18 MR. HUNT: We are still dealing,
19 though, in the area of non-medical circumstantial
20 evidence. I am suggesting to you that if you find
21 this, it is certainly going to have an effect on you
22 in terms of how you approach the other deaths in which
23 the person --

24 THE COMMISSIONER: We are now talking
25 about mental processes, not about the report?

MR. HUNT: When we get to the report -



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

that's right. We are talking about the mental process at this point.

THE COMMISSIONER: Okay, that is fine. Now, I'll take that but I thought for a moment - I thought for a while we were talking about the report.

MR. HUNT: No. No.

THE COMMISSIONER: All right.

MR. HUNT: I am suggesting when you get to the report ...

THE COMMISSIONER: You are just --

MR. HUNT: ... you are dealing with it again under the heading of a non-medical circumstantial component of this exercise that does not - you are not permitted to break down and isolate the individual components of that for purposes of suggesting what suspicion they gave rise to.

Now, I am saying that the incidents that occurred in August, September and October can be treated by you in the same way. In terms of the mental process you look at those incidents - I suggest to you that they can only be characterized as bizarre - incidents that were the product of a very disturbed mind. You look at those incidents and try to determine, if you can, who was responsible for them. It may be that you can't and, again, that ends the exercise. If you can,



1
2 then, that may have some relevance on the question of
3 the categorization of the deaths.

4 For example, if you look at those
5 incidents and you come to the conclusion that you can -
6 with the degree of certainty - that you can isolate
7 the individual responsible for those, if it turns out
8 that that individual is also someone that you have
9 isolated during one of the other exercises of looking
10 at the evidence surrounding an intentional killing,
11 then the evidence of the events in August, September
12 and October are going to, in my submission, go a long
13 way in assisting you to establish in your own mind what
14 the personality and emotional make-up of that individual
15 was. And that is going to have a direct effect on the
16 degree of suspicion that you are going to attach to
17 the presence of that individual at any one of the
18 other deaths.

19 Again, when it comes to your report I
20 am suggesting that you are going to have to deal with
21 this under the heading of the non-medical circumstantial
22 components of it and perhaps indicate what degree of
23 suspicion that component gave rise to, but you are not
24 being asked to detail the various features of that
25 component.

Now, it is obvious from the submissions



1
2 that we attach, I think, a greater index - put a
3 greater index of suspicion on this type of evidence
4 than perhaps Mr. Lamek has in his submissions. It is
5 really my submission because of that, in fact we have
6 put, in my perception anyway, a higher index of
7 suspicion on that evidence. I suggest that you have
8 to look carefully at the babies in the last category
9 that Mr. Lamek set out, that is Hoos, Turner, Monteith,
10 Adamo and Fazio. Where he has suggested there is only
11 in each of those cases one or more non-medical features
12 of circumstantial evidence and that doesn't give rise
13 to anything that would allow you to conclude that these
14 were anything but natural deaths.

15 The reason that I do that is because of the
16 concern that you do not, in any case where there is a
17 basis for suspicion, be it purely medical, purely non-
18 medical, but circumstantial, or a combination of the
19 two, it should not, in any case, tell the parents and
20 tell the public that you are satisfied that they are
21 natural deaths. Because in the circumstances of the
22 situation where we have a self-defined population that
23 gives rise to concern where you find - if you do find
24 that there was even one intentional killing - that
25 the suspicion that it must attach to the type of
circumstantial evidence we are dealing with is so great



1
2 that it takes the most compelling evidence to displace
3 it. And that it is not there - that compelling
4 evidence is not present in the case of Hoos, Turner,
5 Monteith, Adamo and Fazio to allow you to come to
6 the conclusion that those were natural deaths.

7 So, I will deal with them each
8 individually in a minute, but I submit to you those
9 get elevated into the "great category" that Mr. Lamek
10 suggested to you where to a greater or lesser degree
11 you will find that there is a suspicious feature to
12 the death. While you may not be able to indicate how
13 the baby died - the evidence may not allow you to do
14 that - you can certainly say with assurance to the
15 parents that there are factors that give rise to a
16 degree of suspicion in you that digoxin may have played
17 a part.

18 Now, in each of those cases, in my
19 submission, against the background we are dealing with
20 here, the non-medical circumstantial evidence, patterns,
21 time, presence of personnel when taken together with the
22 medical evidence, there does give rise to a suspicion
23 concerning the deaths which is not displaced by the
24 type and quality of evidence that will be necessary,
25 in my submission, to allow you to find that that baby
died of natural causes.



1
2 If I could deal firstly with the case
3 of Lillian Hoos - and I won't repeat anything that
4 has been said by Mr. Lamek in terms of his review of
5 these children. I won't go into any detailed review
6 in respect to these particular babies.

7 You have a child here whose death is
8 described by Dr. Rowe as involving a sudden onset and
9 decline. It was categorized on the basis of the
10 definition that he used Hoos as unexpected because they
11 felt that they could have dealt with malformation.

12 In terms of the reviews that other
13 experts did of the deaths, Dr. Fay felt that the mode
14 of death and the terminal event gave rise to some
15 degree of suspicion. And Dr. Hastreiter lamenting
16 the absence of medical evidence found that there was
17 no strong evidence of a digoxin overdose but that it
18 couldn't be eliminated as a possibility because of
19 one factor or another. The basis for death - cause
20 of death was unclear.

21 In the vote of the gathered experts
22 in September, Hastreiter, Fay, Bennett and Tepperman,
23 they all agreed that this death ought to be categorized
24 as a suspicious one with a low degree of suspicion
25 attached to it. So, that on the basis of the medical
evidence and the experts' opinion evidence, we have



1
2 a sudden onset, a sudden decline. And the experts
3 saying that while perhaps the degree of suspicion
4 attached to it is low, it is there.

5 THE COMMISSIONER: This is Group B
6 of the latter report and that basically the child died
7 with symptoms that are consistent with digoxin
8 poisoning ... Consistent with that.

9 And the circumstantial that you described was the
10 non-medical circumstances. The time of death treated
11 this as 3:00, 3:22 a.m., plus the presence of members
12 of the team ...

13 MR. HUNT: I see.

14 THE COMMISSIONER: There is nothing
15 else?

16 MR. HUNT: No.

17 - - - -
18
19
20
21
22
23
24
25



F-1

EMT/hr

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

MR. HUNT: You put all that together and you come up with a case of suspicion about this death that is not -

THE COMMISSIONER: A case that you say would not have entered anybody's head including yours or mine had it not been for the fact that some children had been - were poisoned.

MR. HUNT: Yes. If you find, for example, that Justin Cook was intentionally killed and this baby died in the same population as he did, the fact that you find Baby Cook was intentionally killed attaches significant suspicion to this and all the other deaths.

If you go further and you find that somebody was present at the killing of Justin Cook who was also present at the death of Baby Hoos, then the suspicion that is attached to the death of Baby Hoos increases even more dramatically, and the evidence that would be necessary to displace that suspicion is even greater, and in my submission it is not there, so that on this child you ought not to come to a conclusion that in the face of that suspicion that the baby died a natural death.

THE COMMISSIONER: That is a little bit different from saying suspicious. If as you say



F-2

1
2 now we must view all of these children with alarm
3 because some of them were poisoned and you really are
4 -- it almost becomes a question of the burden of
5 proof. Being the other way and almost beyond reason-
6 able proof, what do you say if I am not satisfied
7 that this child was a "by digoxin"? That is
8 really what you are telling me to say?

9 MR. HUNT: Yes, and that flows from
10 the significance that I suggest to you must attach
11 to a finding that even one of the babies in this
12 population was intentionally killed.

13 THE COMMISSIONER: What about the
14 effect of that? What about the effect of saying that
15 I am not satisfied that this child died a natural
16 death? What about that? It has been suggested by
17 Mr. Scott and others that it is not my - the only
18 basis that I have is that it is consistent with
19 death by digoxin and the circumstances of death were
20 similar to those that he may have been killed by
21 digoxin poisoning. Is that an appropriate conduct on
22 the part of the Commission?

23 MR. HUNT: Sir, I submit that it is
24 totally appropriate conduct on your part. You have
25 been asked to determine how and by what means the



F-3

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

children died.

THE COMMISSIONER: That is right.

MR. HUNT: If the evidence falls short of allowing a specific determination as to how and by what means a child died in any particular case but that you, taking into account all of the evidence that there is, find that there is a degree of suspicion that digoxin may have killed that child, including in that fact that you may find that other children were intentionally killed by digoxin, that you must then in my submission not just say I can't decide, but you owe it to the families and to the public to tell them what you think about the nature of the death, even though that may fall short of a precise explanation based on the evidence.

This goes back to Mr. Scott's submission to you that no one is interested in your opinion, but I say that couldn't be farther from the truth in a matter such as this. Everyone except those who are intimidated or threatened by your opinion are interested in what you think.

I was going to move to another area.

THE COMMISSIONER: Yes. All right.
We will take 20 minutes now.

---Short recess.



1
2 ---On resuming

3 THE COMMISSIONER: Yes, Mr. Hunt.

4 MR. HUNT: The second baby in that
5 category, dealing with Baby Monteith, and again I
6 think you have my submission, Mr. Commissioner, but
7 the circumstances that surround that death in my
8 submission are such that it gives rise to suspicion
9 that is not dispelled by the type of evidence that
10 is required to dispell it, given the background here.

11 Dr. Rowe again indicated the baby's
12 onset and decline were sudden and rapid, and that he
13 had a measure of surprise at the death since the
14 baby had been stable for two to three days. And Dr.
15 Bain echoed that in his report saying that there was
16 suspicion prior to autopsy that the baby shouldn't
17 have died when it did.

18 While the experts that voted on their
19 opinions on this classified it as a natural death,
20 Dr. Hastreiter said that there was a small possibility
21 of a digoxin overdose. That in my submission is not
22 enough to tell you to classify it as a natural death.
23 The sudden onset and decline of the baby again took
24 place in the early morning hours.

25 In my submission you will find the
presence of the same individuals and if you find that



F-5

1
2 not only is it the same team, but the death occurred
3 in the presence of any one that you isolate as being
4 involved in the killing of Justin Cook then the degree
5 of suspicion that attaches will be heightened in my
6 submission.

7 A combination of those medical factors,
8 sudden surprising onset and decline of the baby, that
9 time of day, in the presence of the same nursing team
10 that was present and perhaps the same individuals
11 it is narrowed down to is enough to raise suspicion
12 that is not dispelled by the views of the experts.

13 Baby Turner, Dr. Rowe described as
14 going into a sudden decline. The consultant
15 cardiologists for the Centre of Disease Control
16 scored that as unexpected but consistent with the
17 clinical condition.

18 Dr. Hastreiter rated this as a fair
19 possibility that the child died of a digoxin overdose.
20 Dr. Mirkin on the other hand said that while digoxin
21 toxicity was unlikely he was basing that on the
22 fact there was no pharmacological or toxicological
23 evidence.

24 In the vote the doctors rated this one
25 as either low suspicion, low degree of suspicion
attaching, or a somewhat higher degree of suspicion.



F-6

1
2 Drs. Hastreiter and Fay rated it a
3 lower degree of suspicion than Drs. Bennett and
4 Tepperman for the police.

5 And on the non-medical side, again it
6 occurred in the small hours of the morning in the
7 presence of personnel that at least were present for
8 the death of Justin Cook and that you may find one
9 or more of them were involved in the killing of
Justin Cook.

10 In summary on Baby Turner the suspicion
11 created by a combination of the medical evidence and
12 the non-medical circumstantial evidence in my
13 submission are not dispelled by evidence such that you
14 ought to be persuaded to classify this baby as a
natural death.

15 Baby Adamo died after a sudden onset
16 and decline according to Dr. Rowe who was surprised
17 that he went into heart failure after a shunt operation
18 because he had been expected to do quite well, and
19 again using Dr. Rowe's definition of unexpected, he
20 rated the death as unexpected because they thought
21 they were going to be able to do something for this
baby.

22 Dr. Hastreiter rated it as a fair
23 possibility of a digoxin overdose. Dr. Mirkin,
24
25



F-7

1
2 unexpected death that was not consistent with the
3 clinical condition, although he rated the possibility
4 of digoxin overdose as slight, and in the vote there
5 was agreement that there was suspicion to be attached
6 to this death although it was of a lower degree.

7 In terms of the non-medical circumstantial
8 evidence we have the presence of the same personnel
9 who were at least present for the death of Justin
10 Cook, and again I am sure that you may find one or
11 more of them on the evidence was involved in the
12 death of Justin Cook, and that will heighten the
suspicion.

13 The timing of this death was somewhat
14 different inasmuch as the baby died in the afternoon
15 as opposed to the small hours of the morning and that
16 may have some effect on the degree of suspicion that
17 you attach, but in my submission to you on a combination
18 of that medical evidence with the expert opinion and
19 non-medical circumstantial evidence, that at least
20 there is suspicion with respect to this death that
21 digoxin may have played a part in that which is not
22 dispelled by any other evidence that would allow you
to classify it as a natural death.

23 Finally Baby Fazio, Dr. Rowe indicated he
24 went through a period of stability and then succumbed
25



1
2 after the sudden onset of critical symptoms and rapid
3 decline.

4 Dr. Mirkin suggested that digoxin
5 toxicity was possible in this baby, that it was
6 possibly an unexpected death, and he noted bradycardia
7 that was attendant on the death.

8 Now in the vote the baby was
9 classified as natural death, and that would no doubt
10 enter into your consideration, but on the non-medical
11 side I draw to your attention again the baby died
12 in the early morning hours and again in the presence
13 of the same team, and you may find in the presence
14 of the same individual that ultimately you may
15 conclude was responsible for the killing of Justin
16 Cook.

17 I also note that Sui Scott indicated
18 that this case stood out in her mind as one where
19 the child was stable and then rapidly declined and
20 died after lunchbreak in the early morning hours.

21 Again I suggest these factors both
22 medical and non-medical, when taken together against
23 the background of, if you find it, one or more
24 killings, deliberate killings on the ward, raises
25 a suspicion that is not dispelled by any evidence
to classify it as natural.



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

So in my submission those five babies ought to be elevated into that broad middle category that Mr. Lamek has suggested are deaths to which a degree of suspicion is attached.

Now my final comment has nothing to do with the deaths as such. It is a matter relating to the evidence and specifically the evidence of Mr. Cimbura from the Centre for Forensic Sciences.

I say that during the submissions of Mr. Scott I was heartened by the praise that Mr. Scott on behalf of the Hospital for Sick Children directed to Mr. Cimbura for his excellent work in developing tests for digoxin and his work in testing and re-testing the various samples which were submitted to him.

I suggest to you, sir, that Mr. Cimbura has withstood a careful, detailed, exhaustive cross-examination here on his methodology and his melo- testing procedures, and without wishing to be dramatic I suggest to you that he has emerged as one of the true heroes of this tragedy inasmuch as he started in an area which was virtually new and he developed his tests and procedures and pioneered in an area where there was nothing really to guide him, and he has come through that with really in my



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

submission no blemish on the work that he has done.

I cannot now help but remember the
intemperate and obviously ill informed remarks which
were directed at him by another witness here, Dr.
Stephen Soldin from the Hospital for Sick Children,
when he appeared here as a witness in October of
last year. In the event that you are interested,
it is Volume 51, page 1437.

.....



RD/Gpg 1
2 I am sure you will remember the
3 exchange, but Dr. Soldin took it on himself to
4 suggest that the samples that he so badly wanted to
5 carry out the tests on had not been carefully
6 handled in the past. He says at Page 1437, in
7 answer to a question:

8 "A. I would hope that you would
9 be more careful than you have been
10 perhaps in the past."

11 He was asked what he was referring to and he says:

12 "A. Well, I am somewhat critical
13 of the way some of these samples were
14 analyzed as I have already stated."

15 In my submission, those remarks on
16 his part have not been borne out at all by the
17 evidence, that regretablely those remarks did much to
18 cast out on the bona fides not only of Dr. Soldin,
19 but on the part of the Hospital for Sick Children.

20 I submit to you that you can rely on
21 and act upon, with full measure of confidence, the
22 work that Mr. Cimbura has done in analyzing these
23 samples, notwithstanding the remarks of Dr. Soldin,
24 and I suggest, although I have no expectation that
25 this will be acted upon, that Dr. Soldin owes Mr.
Cimbura a public apology for his ill-advised criticisms



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

G-2

of him at the time.

I am finished. I will sit down and wait for Dr. Soldin's apology and Miss Cecchetto has a number of comments directed to the medical and pharmacological facts.

THE COMMISSIONER: Thank you.
Miss Cecchetto.

ARGUMENT BY MS. CECCHETTO

If I could just pick up on Mr. Cimbura's work. There was a question raised yesterday in Exhibit 425, which is the blue book that Mr. Strathy tendered, and the issue raised was, as to whether or not Mr. Cimbura, in his study, found at Exhibit 213, Page 8 entitled An Analysis of Post-Mortem Blood and Heart Tissue From Children Not On Digoxin, had conducted those tests with HPLC. I can indicate that I have looked at the transcript and I have spoken with Mr. Cimbura and he states that Ms. Rae is correct and that the analysis was an RIA analysis.

THE COMMISSIONER: That is right.
Which part is that?

MS. CECCHETTO: Page 7 of Exhibit 425.
It is referred to in those paragraphs, setting out the concern that there is some suggestion or that there



1

2

may be a suggestion that HPLC was used.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Mr. Cimbura indicates that the analysis that he conducted on these samples of children, who were not on digoxin, was conducted using a preliminary methylene chloride extraction process followed by RIA. The purpose of this study was as part of his evaluation of his RIA technique prior to using that technique on the samples, on the case samples of the children that we are now considering.

THE COMMISSIONER: Then I think we looked at the top of Page 8. I don't think there would be any dispute about this. His purpose was not to determine the HPLC separation of substance X. Am I not correct?

MS. CECCHETTO: That is correct, but I will have some comments about his use of HPLC.

THE COMMISSIONER: That is right. It was not in this particular study. HPLC was not your --

MS. CECCHETTO: No. He was asked to comment on this work and asked to comment on Dr. Seccombe's work and he indicates -- first of all it compares to Dr. Seccombe's work to this extent that both were used in RIA procedure, however, it differs from Dr. Seccombe's work in the sense Mr.



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Cimbura used an extraction procedure. In my respectful submission, the bottom line of this study still remains and that is that Mr. Cimbura did not get the positive readings, such as those that were reported in Dr. Seccombe's work, and that the result of this study suggested that certain inferences could be drawn and those inferences were that either the samples that he was testing did not have a substance X or anything that cross-reacted with his antibody or that substance X was present in such low levels below the protection level of one nanogram, which was his protection level, or that substance X did not cross-react or that substance X was removed by the extraction processes.

I would also like to stress that in respect of the case samples of the children who are the subject matter of the Commission, Mr. Cimbura did subject those samples to RIA HPLC/RIA.

THE COMMISSIONER: I'm sorry, which samples are these?

MS. CECCHETTO: Mr. Hunt breaks them down in 423, except where it is accepted in his report, he conducted RIA HPLC.

If you turn to 423 (4) Page 1, where you have a breakdown of Justin Cook, that will indicate



G-5

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

that where he conducted RIA HPLC/RIA and similarly, without going through it, it indicates that in all the serious samples that he did conduct RIA HPLC/RIA.

The only other aspect that I would respectfully submit with respect to substance X which has perhaps been stated before, is that it really is, in my respectful submission, a red herring in this case, because Dr. Seccombe's highest level was a level of 4.1 on a premature four day infant. So, in my respectful submission, even if you accept that there is substance X it really doesn't explain the levels that we are seeing in the children under review.

Now, with respect to the adequacy of Mr. Cimbura's results, Mr. Hunt was correct when he said that Mr. Scott praised Mr. Cimbura for developing methodology, however, there was a concern or a suggestion that I took from Mr. Scott, with respect to the meeting of experts. In Volume 154, Page 1049, Mr. Scott suggests that a team of experts in Exhibits 399 to 400, considered and approved the reliability of the data --

THE COMMISSIONER: All right. One fifty-four, page what?

MS. CECCHETTO: 1049.



1

G-6

2

THE COMMISSIONER: Yes.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MS. CECCHETTO: There is a suggestion in that page that the team of experts considered and approved a reliability of Mr. Cimbura's data with respect to only four children, which were the children of Cook, Hines, Lombardo, and Belanger. He suggests that we don't have the assessment of the team of experts with respect to the other samples that were conducted.

In my respectful submission, if one reviews Exhibit 399 and Exhibit 400 in its entirety it is clear that the team approved of the methodology of Mr. Cimbura and it is clear that they had no hesitation whatsoever in accepting his results.

If you look at Exhibit 399, sir, the first purpose of the meeting was to determine a set of criteria for the identification of digoxin, using either gas chromatography and mass spectrometry or radioimmunoassay in combination with high pressure liquid chromatography, HPLC or other appropriate analytical techniques. So that was one of the aims.

If you go to Page 7, Conclusion 2, is that the current data, based on RIA and RIA/HPLC, are sufficient to confirm the presence of digoxin, where such a finding has been made.



G-7

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Similarly, without reading them, sir, if you go to Exhibit 400, Paragraph 5 (2) and Paragraph 6 (1), and Paragraph 6 (2), in my respectful submission, you are left with the impression that this team of experts was clearly satisfied with the methodology used by Mr. Cimbura.

It is clear that Mr. Cimbura's methodology, in all of the samples, was the same as with respect to the four samples, insofar as it related to RIA and HPLC.

I would also point out that Mr. Roland at Volume 37, Page 1455 and 1456, when he tendered Exhibits 399 and 400, made the following comment:

"The conclusion basically at the end of the two documents is that the panel felt or the group felt that there was no useful purpose in conducting any further tests on the material available in order to detect digoxin, and that they were satisfied that the procedures followed by Mr. Cimbura and the Centre of Forensic Sciences were satisfactory in detecting digoxin with respect to the tests that he did do by way of RIA and HPLC."



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

As Miss Cronk pointed out, there was acceptance of Mr. Cimbura's methodology and there was acceptance among the experts that what Mr. Cimbura was measuring was, in fact, digoxin.

It is my respectful submission that there is no basis on the evidence to conclude that the team of experts was only satisfied with respect to the four samples and that they didn't have the same degree of satisfaction with respect to the samples for all of the children.

Now, with respect to the individual children as Mr. Hunt has stated, we don't really have any major disagreements with Mr. Lamek's assessment, subject to those last five children, but I would like to add some comments.

In respect to the case of Justin Cook, it is my respectful submission that Mr. Strathy yesterday suggested the possibility of a medication error at resuscitation and he suggested that the possibility was that the medication error occurred at 4:29 or 4:32 where digoxin was substituted for atropine I believe. I would indicate again, as was pointed out, that there was a real problem as to whether or not digoxin was on the crash carts, in view of the fact that Dr. Mountstephen and Dr.



1

2

Costigan had already been delegated to remove it.

3

4

5

6

I would respectfully submit that Dr. Costigan had had serious suspicions about what was going on at the Hospital at that time and he would have been vigilant, with respect to digoxin, especially on that particular ward.

7

8

9

10

11

12

13

14

15

16

Now, even if you accept that it was overlooked and it was on the crash cart, you are left with the problem, as you pointed out to Mr. Strathy yesterday, that they would have to pick up the digoxin ampules from any number of ampules that were on the crash cart. Even if you accept that, sir, in my respectful submission there is a real problem with the timing of the administration. In fact, the only person who would support the scenario that Mr. Strathy has suggested to you is Dr. Spielberg's scenario.

17

18

19

20

21

All of the other experts, and I am not going to go through them in the Exhibit that was filed today by Miss Cronk, but all of the other experts would make that scenario impossible, because they don't concede that administration could be as late as at 4:29 or 4:32.

22

23

24

25

With respect to the other cases of Pacsai, Miller, we agree with Mr. Lamek and I don't



1

2

intend to add anything.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

In respect of the Estrella case, sir,
again we agree with Mr. Lamek's position that the
Estrella sample, the gutter blood study, should be
taken by you to be a reliable study and that you
should rely on the 72 level.



H-1

JR/hr

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Mr. Sopinka, yesterday, as Exhibit 424 set out - set out on page 9 all of the events relating to the reliability of the gutter blood study. I don't intend to repeat that evidence but I would refer you to it.

The only other point that I would make, sir, with respect to the reliability of the 72 sample, I would ask you to consider is the greater than 4.7 rating on the leg sample. If you look at Exhibit 213, sir, page 22 --

THE COMMISSIONER: Let me check , I might not have all the pages.

MS. CECCHETTO: Page 22 it is called the "Distribution of Digoxin and post mortem blood from different sites "

THE COMMISSIONER: I am sorry.

MS. CECCHETTO: And, "The vitreous humour of 18 controlled children on digoxin thereapy".

THE COMMISSIONER: Yes.

MS. CECCHETTO: This study involved a protocol to repeat what had happened with respect to the Estrella leg sample. The important point about that, sir, appears at Volume 52, page 1691 and 1692.

At page 1691, at about line 10, they refer to the protocol and then Mr. Lamek in his



H-2

1

2 question says:

3

4

5

6

7

8

9

10

11

12

"And are the numbers which appear under the columns of FV-1 and FV-2 in the document in which we are now looking the results of your assays on the leg vein samples drawn in accordance, as you understand it, with that protocol?"

And that was to draw the first sample immediately at the autopsy and then return three hours later and to draw it from the femoral vein in the method of trying to replicate the Estrella sample. And the answer to that is:

13

14

15

16

17

18

19

20

21

22

23

24

25

"That is correct, sir".

Turning to page 1692, Mr. Lamek says :

"Could I ask you to focus on the femoral vein results? Do they provide you with any basis for considering that the sampling technique which was used in Estrella, although not perhaps ideal, distorts the results in terms of digoxin assay? Is there any basis for questioning the appropriateness of the sample and the result achieved in it?"
A. No. They tend to be lower, as I would expect it from the femoral vein.



H-3

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

It is a peripheral circulation, and there were suggestions to this in the literature and this is the results I expected to get. . . It would be lower than anywhere else.

Q. Indeed there are only four positive results recorded under the FV-2 column. As I read the attached key FV-2 was the sample drawn three hours after the beginning of autopsy?

A. That is correct.

Q. And therefore the one which in fact most closely approximated the timing of the Estrella sample. And those values appear, do they not, to be slightly lower than those recorded in the FV-1 sample? "

Those would be the samples drawn immediately on autopsy.

"A. Yes."

So, the importance of that, sir, is that it shows that in those cases which gave a positive reading the levels tended to drop after three hours. So, that would suggest, sir, that this greater than 4.7 level might - well it is difficult to know what 4.7 represents - it suggests that even after three



H-4

1

2

hours you still had a level greater than 4.7, so it
does suggest some reliability.

3

4

THE COMMISSIONER: Just a question.

5

On the first, second and third columns the post
mortem reading - I take it that the post mortem
reading --

6

7

MS. CECCHETTO: Heart.

8

THE COMMISSIONER: Heart, is it?

9

MS. CECCHETTO: Yes, and sagittal

10

sinus.

11

THE COMMISSIONER: And what is DD?

12

What is that in the second column?

13

MS. CECCHETTO: I think that is the

14

three hours later, sir... distribution of digoxin...

15

I think that is the second column there is the three
hours later, sir.

16

THE COMMISSIONER: I see.

17

MS. CECCHETTO: But I am talking about the

18

FV-1 and FV-2, sir.

19

THE COMMISSIONER: Yes.

20

MS. CECCHETTO: That shows the amount

21

that was taken immediately on autopsy from the

22

femoral leg vein and the amount taken three hours

23

later. And you have an indication in the -- you

24

won't get a greater than 4.7 in any of them but you will

25



H-5

1

2

have an indication, for example in page number 10 it goes from 4.6 to 3.8.

3

4

THE COMMISSIONER: That is where there was a reading of ... was it 29 nanograms? Is this correct?

5

6

7

MS. CECCHETTO: No. The reading from the femoral leg vein.

8

9

10

11

12

13

14

15

THE COMMISSIONER: No. I am looking at -- I am trying to understand - what are these compared with? These are compared with regular serum -- are they post mortem serum readings? Is that it? And the purpose of all this, which you are giving to me, shows that you take from the femoral vein you normally get less than you would if you were to get from some place else in the body, is that right?

16

17

18

19

20

21

22

23

24

25

MS. CECCHETTO: Yes, that is true.

The other important fact that I am relying on, sir, is that when with a particular baby when they took the first sample -- for example, of baby number 10, when they took the first sample from the femoral leg vein immediately at the autopsy, they got a reading of 4.6 nanograms and then three hours later when they went back in and took it - milked the leg vein as they had done in Estrella - they got a reading of 3.8. So, that --



H-6

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

THE COMMISSIONER: The reason that I mentioned this is that there has been a suggestion greater than 4.7. You will have the magnification of the ante mortem reading that Janice Estrella had with the post mortem factor at an edge. And that is a couple of days before. If we look at page 12 of Miss Cronk's ... see, on the 8th of January she was at 7.8 nanograms. On the 9th of January it was 4.7 nanograms. Now, if you have that post mortem factor add on to that, she had -- that is easy about 4.7. If she were at 4.7 the day of death, it is quite possible that two hours later it would be greater than 4.7.

MS. CECCHETTO: I don't disagree.

THE COMMISSIONER: What I was asking is from this Exhibit 213, what were the figures on the left hand side? Were they suppose to be the regular post mortem readings that should be taken either from the heart or the brain or wherever they do take them?

MS. CECCHETTO: Well, the heart.

THE COMMISSIONER: Because it shows in fact, the readings from the femoral vein is ordinarily less than it would be if it were taken from the usual source. That proves something.

MS. CECCHETTO: Mr. Cimbura indicates



H-7

UR/hr

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

in that passage that I read to you that when he was conducting these studies what he noted was the reading from the femoral vein would be less than the reading from the heart or less than the reading from the sagittal sinus, by and large he indicated that that corresponded to the literature. But he also noted that in an return three hours later to the femoral vein to repeat the milking of the vein in order to try and replicate the Estrella studies, he noticed that the levels went down in those cases where he got a level. In many cases he didn't get any levels at all. They didn't show up in his studies or they were below his detection. But in those cases where he did get a level they went down. So, the two points that arise out of that is that the level in the femoral vein will be lower than a level in a heart - in the heart tissue or in the sagittal sinus. And the second point is that the level in the femoral vein, according to this study, tends to fall after the three hours.

And the only point that I make with respect to that, sir, is that it is true that we don't know if greater than 4.7 means 6. On the other hand, we don't know if greater than 4.7 means 62 or 78 or whatever. And in my respectful submission



1
2 if you would have had a reading in the leg of 2
3 nanograms, or something, then that might throw
4 some doubt on the validity of the 72 reading
5 but it is still greater than 4.7, three hours later. So
6 I do suggest that is a factor to be considered when
7 you are considering the reliability of the 72
8 level. And that factor, in combination with all of
9 the other factors that Mr. Lamek mentioned, and in
10 view of the fact that this child was off digoxin
11 for four days before she died, in my respectful
12 submission, the 72 reading is greater than 4.7 reading
13 and the manner of the death of the child
14 suggests that the reliability can be placed on the
15 72 reading and that, in fact, this child, in my
16 respectful submission, you would probably find died
17 of an overdose of digoxin.

16 The only other point with respect to
17 Estrella is more a point of clarification, sir.

18 Both Mr. Lamek in Volume 148, page 171
19 Mr. Ortved in Volume 155, page 1207, suggest that
20 on the examination of the sample taken from
21 the gutter blood in January of 1981 by the Hospital
22 would have revealed its suspect source and would have
23 allayed any concern. I am not making any judgement
24 on that at all, sir.
25



H-9

1
2 The point that I would like to clarify
3 is that although there is evidence on the record
4 to indicate that when the level was reported to
5 Dr. Freedom, he expressed some concern that the level
6 was either elaborate or an artifact; that
7 it was possibly contaminated. There is no
8 evidence whatsoever that there was any informed
9 opinion at that time that the level was high because
10 it was drawn through the gutter blood.

11 It is respectful submission, that it
12 was only after the preliminary, when concern arose
13 and when the protocol was set up to replicate that
14 Estrella situation and to undertake the gutter blood
15 study, that the real question arose of the possible
16 contamination of that. . So, prior to
17 that time, and just for point of clarity in
18 the evidence, it is my respectful submission that
19 there was no informed source, and that because the
20 sample was drawn from the gutter blood and the level
21 would be higher, if anything.

22 At the preliminary --

23 THE COMMISSIONER: I thought it was
24 the other way around. I agree with that, but --

25 MS. CECCHETTO: The only other factor
that I would bring, or would suggest to you, sir,



H-10

1
2 with respect to Hines, Lombardo and Belanger, we
3 agree with Mr. Lamek that in each of these cases
4 that you should find death is due to digoxin overdose
5 deliberately administered.

6 And with respect to both Mr. Scott's
7 and Mr. Strathy's submission that the digoxin date
8 in these children is . qualitative only and
9 does not permit the inference that digoxin lead to
10 their deaths, or does not permit the inference of
11 an amount. In our respectful submission, we would
12 suggest to you that you should
13 adopt the approach that was set out in Dr. Kauffman's
14 report at page 12, Exhibit 266, wherein he indicates
15 that :

16 "Four infants, (Belanger, Cook, Hines,
17 and Lombardo) for whom no digoxin
18 was prescribed, had significant amounts
19 of digoxin infixed or exhumed tissues.
20 This indicates that these infants
21 did receive digoxin at sometime prior
22 to their death either by error or
23 by an intentional act. There is a high
24 probability that digoxin directly
25 contributed to the death of these
infants. Two of these infants, (Belanger,



H-11

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

and Lombardo) died within five days
of each other, in December, 1980.
The other two infants (Cook and Hines)
died two weeks apart in March, 1981.
Among these four infants, only in the
case of Cook was there adequate
details of digoxin information with
which to make an estimate of the
amount of the dose, the route of
administration of the dose, and the
approximate time of administration. "

.....



I-1

EMT/hr

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

"It seems unusual that the same medication error would occur with this frequency on the same ward during the same shift. Therefore I think there was reasonable probability that digoxin was deliberately administered to these infants."

That view of medication error was shared by Dr. Mirkin and Dr. MacLeod both whom thought it was unlikely that all of these four children would have received this medication by error.

In my respectful submission if you accept that the medication was not given to them erroneously then you are left with the situation where you have someone deliberately administering an unprescribed dose of digoxin to four children, two of whom, Cook and Lombardo, it was contraindicated and it is my submission one should reject medication error and can properly find that there was deliberate administration and it contributed to the death of these children.

The only other aspect with respect to the Lombardo child, Mr. Strathy yesterday made reference to the fact that Nurse Bucci could not recall whether or not she administered heparin to the child



I-2

1
2 or whether she changed the heparin in the sage pump.

3 You will recall the only medication
4 that Lombardo was on was the heparin.

5 I would like to point out to you,
6 sir, that at Volume 139, page 2163 to 2182, Miss
7 Bucci although she can't recall changing the medication
8 does recall being in the medication room with Phyllis
9 Trayner drawing up a drug and she recalls that she
10 had the chart in the medication room.

11 Now she says she doesn't know whether
12 or not she was drawing up heparin or digoxin but she
13 did refer to the fact that with digoxin you would
14 not have required the chart in order to draw up
15 digoxin. You would only have required the medication
16 ticket.

17 Again as Mr. Lamek pointed out and
18 Miss Bucci pointed out there is a real difficulty in
19 confusing the two drugs because of the matter of
20 distribution and because of the different storage
21 and the manner used, and I would also like to point
22 out that she very clearly made it plain that she
23 always read the ampule when she drew it up. So you
24 have a situation here if you are considering medication
25 error where it is her practice to draw it up she says
that it is very difficult to confuse and she does



1

2

recall having the chart in the medication room.

3

I don't have any other submissions.

4

THE COMMISSIONER: Thank you, Miss
Cecchetto.

5

Mr. Percival?

6

7

MR. PERCIVAL: Mr. Commissioner, we
have some logistic problems. We have got an easel
and some charts that we would like to do. May I
suggest - we would just get started, and may I suggest
that we start at 2:00 o'clock and by that time I will
get it done.

11

12

THE COMMISSIONER: Yes. All right.

13

MR. PERCIVAL: If that would suit
your convenience, sir.

14

15

THE COMMISSIONER: Yes, we will rise
until 2:00 o'clock.

16

MR. PERCIVAL: Thank you, sir.

17

---Lunch break.

18

19

20

21

22

23

24

25



1

/EMT/ko

2

--- On resuming at 2:00 p.m.

3

THE COMMISSIONER: Yes, Mr. Percival.

4

ARGUMENT BY MR. PERCIVAL:

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Mr. Commissioner, it has been over 156 Commission sitting days since you embarked upon what is likely one of the longest, most complex and most important inquiries in the history of this Province.

The importance of the Commission, it goes without saying, stems from the public need and indeed the public's right to know what happened in the cardiology ward of the Hospital for Sick Children during this time period in question. The public has a right to know how and by what means these babies met their death.

However, even more important than the legitimate curiosity and concern of the public is what I term to be the absolute right of the 72 parents of these babies to know what happened to their children to cause their death.

It is because of the importance of this Inquiry that the Metropolitan Toronto Police Force has done everything in its power to assist both you and your Counsel throughout these proceedings. And you well know, Mr. Commissioner, the spirit of co-operation which has existed between your staff and the Metropolitan



1

2

Toronto Police Force from day one of your appointment.

3

4

5

6

7

And because of the important function of this Inquiry it is indeed fortunate that you chose able and excellent Counsel to assist you in your task. Both Mr. Lamek and Miss Cronk have done an exemplary job in this Commission and deserve a great deal of credit and praise.

8

9

10

11

12

13

On occasion when Mr. Young or I were on our feet for one day we were exhausted and yet your Counsel went on and on and on leading evidence beyond belief, and one could say without question they have given you exhaustive evidence that is complete in all respects.

14

15

16

17

18

19

20

21

22

Perhaps the greatest good fortune that surrounds the holding of this Inquiry is the fact that this Commission had a most eminent and fair jurist as its Commissioner. As we have noted I think in various submissions to you, sir, throughout this Commission there are numerous parties represented here with diametrically opposed interests. The task of determining how and by what means the children died is undoubtedly a difficult if not an impossible one and therefore requires an astute, patient and caring individual to preside over these proceedings.

23

24

25

All Counsel here without exception, sir,



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

AA 3

will agree that you have displayed all those qualities on a daily basis.

It is true that there have been some negative comments in the media which tend to cast an adverse light upon the complete fairness of these proceedings, but I say to you that Counsel who have been in front of you for the past 156 days and the media personnel who have also been involved for that period of time have no hesitation in attesting to the fact that by elaborate measures you have protected the rights of the individual while at the same time fulfilling your mandate of seeking the truth in the matter.

We echo Mr. Lamek's comments made to you almost two weeks ago that the almost total absence of acrimony in these proceedings is in a very large part a product and a reflection of the patient and fair manner in which you conducted this Inquiry.

At the outset in the course of my submissions may I say that certain facts have become very clear as a result of the evidence which was heard in the 146 Commission evidence days. And in particular we respectfully submit the following facts cannot be disputed:

There was an inordinately high number



1
2 of babies died on Wards 4A and 4B during the period in
3 question. This increase in deaths was localized on
4 the cardiology ward of the Hospital and represents a
5 startling increase of ward deaths as compared to the
6 previous and subsequent nine month periods.

7 I submit to you, Mr. Commissioner, that
8 the statistical evidence is clear and cannot be justi-
9 fied on any rational basis.

10 Secondly, there was a distinct
11 significant association in the vast majority of these
12 deaths with the presence of a singular nursing team
13 and that with Phyllis Trayner at its head.

14 Thirdly, in the majority of the deaths
15 the onset of critical symptoms occurred in the early
16 morning hours. Where we on behalf of the Metropolitan
17 Toronto Police Force submit murders did occur in this
18 hospital, all of the babies commenced the onset of
19 critical symptoms during that time period. It is clear
20 that there were toxicology findings which indicate the
21 presence of a large quantity and sometimes fatal amounts
22 of the heart drug digoxin in many of the babies. There
23 have not been any unexplained deaths in the cardiology
24 ward of the Hospital for Sick Children since March
25 22nd, 1981.

It is our submission that it is clear



1
2 that at least eight children were deliberately
3 murdered by individuals through the intentional
4 administration of the very powerful heart drug
5 digoxin.

6 Lastly, because of the bizarre nature
7 of these crimes, it is difficult to categorically
8 state that none of the remaining 28 children were not
9 victims of these killers.

10 Before addressing each of these issues
11 in more detail we would like to deal with a preliminary
12 matter raised by Mr. Scott during his submissions last
13 week. Mr. Scott suggested to you that it would be
14 improper for you to conclude that a death is suspicious,
15 and I note that Mr. Hunt today was using the same word,
16 "suspicious".

17 Mr. Scott suggested to you that you are
18 to decide either that a death was natural or unnatural,
19 and that it would be improper for you to simply state
20 that you have some suspicions with respect to a
21 particular death.

22 On behalf of the Metropolitan Toronto
23 Police Force we submit that it is important that your
24 findings be based on proven evidence in these
25 proceedings whether it be documentary evidence, oral
evidence from the mouths of laymen, or from experts.



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

We submit that your findings should not be based upon innuendo, should not be based upon gossip, should not be based upon suspicion or should not be based upon mere belief where there is no factual foundation for it.

However, after saying all of this, we point out to you there are 72 parents in this Province with a right to know, an absolute right to know, what if anything you can conclude as to how and by what means their children died. And in some instances as I am sure you are well aware it is impossible to make decisive conclusions simply because there is insufficient toxicology evidence in existence.

Nevertheless, the parents of these children have no less right to know what you can state about the cause of death of their child. Surely a continuing major focus of this Commission is a search for the truth.

The Commission was formed primarily to satisfy the legitimate question of the parents, and the question, was my child killed or did she or he die a natural death in the hospital? I submit you must attempt to answer that question with each of the babies based upon the evidence proven before you.

Now as we mentioned earlier the Force



1
2 has done everything in its power to assist in making
3 this Commission an open, full and complete inquiry.
4 The Force has supplied any and all information in our
5 possession to both you and your Counsel when it was
6 required.

7 We also argued before you, before the
8 Divisional Court and the Ontario Court of Appeal in
9 an attempt to have your interpretation and our
10 interpretation in agreement accepted in relation to
11 the Order in Council.

12 In March of 1984 the Court of Appeal
13 ruled that you were not entitled to name names, and
14 hence you could neither blame anyone for the deaths,
15 nor could you exonerate any person even if you found
16 them blameless.

17 Had the Court of Appeal agreed with
18 your original Ruling we would have had more specific
19 submissions to make to you today. We cannot for
20 obvious reasons.

21 However, I say to you, Mr. Commissioner,
22 based upon the pervasive evidence that has been heard
23 by this Commission there is not much doubt that the
24 killers of these babies were no strangers to the
25 hospital at the time they were perpetrating their
heinous crimes.



1
2 As they did while presenting the
3 evidence before this Commission, Mr. Lamek and Miss
4 Cronk have done an excellent and comprehensive job
5 in compiling and presenting their argument. It is
6 easy to agree and indeed adopt many of the submissions
7 made by your Counsel. The argument of Miss Cronk and
8 her full and complete analysis of the evidence involv-
9 ing digoxin cannot be challenged and deserves your
acceptance.

10 We adopt without hesitation Mr. Lamek's
11 review and submissions with respect to the following
12 theories which were proposed by some and probably will
13 be proposed by others and which we submit should be
rejected by you.

14 Those theories which would have you,
15 sir, believe that nothing really occurred at this
16 hospital and what this Commission is all about are
17 three in total: One is the theory that nothing
18 unnatural happened at that hospital. The second is
19 all or most of the deaths were due to medication
20 errors, and third, the deaths were caused by an unknown
visitor.

21 If anyone has sat as you have, sir, and
22 listened to 146 days of evidence there can be no doubt
23 that something most unnatural, most unusual, happened
24
25



1
2 at the hospital during this nine month period. There
3 can be no doubt based upon all the proven evidence the
4 deaths were not due to medication errors. There
5 cannot be any doubt that the deaths were caused by
6 a person well known and familiar to the hospital and
7 setting and most probably an employee of this
8 hospital.

9 Mr. Lamek's persuasive comments in
10 argument as to why each of these theories should be
11 rejected deserves your acceptance.

12 While we adopt Mr. Lamek's view and
13 argument with respect to many of the baby deaths and
14 we will shortly return to this in our argument, we
15 feel obliged to take exception to two matters raised
16 by Mr. Lamek.

17 Page 193 of Volume 148 Mr. Lamek
18 stated that:

19 "In short, Mr. Commissioner, with
20 respect to the gaps or lulls in the
21 deaths and the apparent lack of any
22 pattern, rhyme or reason and the
23 timing of deaths from month to month,
24 my submission is there may well be
25 not a pattern, but a reason for the
uneven sequence of deaths."



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Mr. Lamek further noted that simply because a pattern is not apparent does not mean that one does not exist.

It is our respectful submission before you, sir, today that there is in fact a pattern for the timing of these deaths. In particular if one is to examine a number of long nights worked by the Trayner nursing team as against the number of deaths in any given month, we respectfully submit that such a pattern becomes all too clear. Moreover, any particular nursing team would have less than 25% exposure to any one baby, and even less as one well knows that many of the baby deaths were occurring on the long night shifts.

The statistical analysis in this regard is persuasive and almost overpowering. The fact that these deaths appear to be related to long night shifts that were worked by this nursing team may well indicate that the killers had an opportunity to perform their cruel acts on these occasions when they were least likely to be detected.

- - - -



BB
RD/pg

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Secondly, Mr. Lamek also notes that there were four possible explanations, as to why there was no further unexplained deaths after the arrest of Susan Nelles. As we understood his submissions, those explanations are fourfold; one, that the arrest of Susan Nelles removed the culprit and, secondly, someone else, other than Susan Nelles, was the culprit and found the situation too hot and dangerous and, therefore, was required to stop. The third proposition, someone other than Susan Nelles was the culprit, but with the arrest of Susan Nelles that individual had achieved his or her objective in implicating Miss Nelles and, therefore, there was no reason to continue causing more baby deaths and, lastly, the fourth proposition proposed by Mr. Lamek was that the conditions on the ward were altered and made it impossible for the killer or killers to continue without inviting almost certain detection.

It is interesting to note, Mr. Commissioner, that Mr. Lamek did not note a fifth possibility or proposition that Miss Nelles was working in conjunction with another individual on the same nursing team --

MR. BROWN: Mr. Commissioner, I have a formal objection to this argument of Mr. Percival,



BB-2

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

even before you put it. It was my understanding, sir, that the basic rule of fairness requires that if a Counsel has an allegation to make against a particular person, Counsel has to put that allegation to that person if that person testifies. This allegation was never put to Miss Nelles by Mr. Percival, and indeed, its absence is deafening by its silence. I submit that Mr. Percival should not be allowed at this particular stage to argue that Miss Nelles was in anyway colluding or conspiring with the person. It would be completely unfair and prejudicial to her, since she never had an opportunity to respond to that allegation when she was in the witness box.

Mr. Percival failed to put it to her in the witness box. There is no evidentiary foundation for that allegation and I submit that he should not be allowed to argue that proposition at this point in time, sir.

THE COMMISSIONER: I put it another way, though. How can I put this in my report even if this is a proposal of yours?

MR. PERCIVAL: Mr. Commissioner, I am merely responding. You know, one of the things I found rather interesting was that you, sir, were told by the Court of Appeal that you could not go into



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

the question of blaming or finding people to be exonerated, yet Mr. Lamet went into the four propositions and by inference did what the Court of Appeals said you could not decide.

I understand Mr. Sopinka yesterday did the same thing, as to why Miss Nelles should not be implicated. Surely, sir, I have the obligation and the right and the entitlement before you to contend the opposite.

THE COMMISSIONER: Well, there is something though in what Mr. Brown says. You see, if it is something that I can't put in the record at all it doesn't --

MR. BROWN: Mr. Commissioner, as I said --

THE COMMISSIONER: The problem I'm faced with --

MR. BROWN: -- I would not have gone into this. As I said to you at the outset, my submissions would have been silent in relation to this, because what I perceived the Court of Appeal ruling to be, as you did, sir, but when I hear your own Counsel talk in terms of four propositions in saying there is no basis for the first three and therefore it is the fourth, and when I hear Mr. Sopinka give the



1

BB-4

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

submissions in relation that he did about the
exoneration of Miss Nelles, why is it good to do it
that way and not good to do it the other?

Now, I say I am responding at this
particular point, because it has been said by both
of them to this juncture.

THE COMMISSIONER: Yes. I take it
you have made your statement with respect to this
and we may go on.

MR. BROWN: Yes, I have.

THE COMMISSIONER: I am not ruling
one way or the other, because what has been done has
been done.

MR. BROWN: Obviously.

THE COMMISSIONER: However, I have
reservations. I don't mind if you can somehow or
another wrap it in some way so that names don't come
out.

MR. PERCIVAL: Do I say that there
are five members of the team and one of the things
that you could have done is that there may have been
two working in conjunction with each other? Is that
satisfactory? It seems to be a very unsatisfactory,
with respect.

THE COMMISSIONER: It is not the way



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

you or I wanted to do it. We are faced with a fact that there is a ruling in the Court of Appeal and because of that we both have to be careful. I perhaps have to be more careful than you, because there is no injunction upon you, but I ask you -- If I can't put it in my report, I ask you so far as you can, to put it in some perhaps less precise form than you did. However, carry on.

MR. BROWN: Excuse me, sir, my objection is not based on the ruling of the Court of Appeal. My objection is based on a much more fundamental ground.

THE COMMISSIONER: That is argument. You can say that this is argument and it is no good, because it was never put, but that doesn't prevent him from arguing. You can rule out a question, or at least you can rule out -- perhaps you can rule out some kind of evidence for some purpose, delivering some kind of evidence because it wasn't put before the witness, but surely Counsel are entitled to argue, even if the argument is not acceptable.

What you argue in reply is that that position cannot be left out because it was not put to Miss Nelles. The real objection is not that at all.



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. BROWN: In the context of this form it is highly unethical to make that sort of allegation without having the guts to put it to the witness while she is in the witness box.

MR. PERCIVAL: I don't wish my friend to get into ethics, please, Mr. Commissioner. He may say it is improper, but ethical I do take umbrage to.

THE COMMISSIONER: Yes.

MR. PERCIVAL: I submit Mr. Lamek, in putting the four propositions, did not consider a number of very important evidentiary matters, which I submit did not support his hypothesis.

The first three propositions should be disregarded by you. That was put clearly by you and I can give you the reference page in relation to this. That is Page 192 in Volume 148, Mr. Commissioner.

I just merely ask you to note that those were the four propositions and Mr. Lamek indicated there was no evidence to support the first three. I suggest to you that you should take into account some items of evidence that Mr. Lamek did not allude to in considering his argument to you on that basis.



3-7

1
2 The first is the fact that the killer
3 or killers may have had digoxin in their possession
4 prior to the weekend of March the 21st. If you will
5 recall the evidence the individual who worked
6 on 4 A/4 B, in fact individuals who worked throughout
7 the Hospital, had unlimited access, free and open
8 access to digoxin during the epidemic period. It
9 could be purchased without prescription at most
10 drug stores, but with the free and open utilization
11 of the drug throughout the Hospital it is not likely
12 that any employee at the Hospital would have to go
13 to the extreme of purchasing the medication at a
14 drug store.

15 Before that weekend of the 21st, 22nd,
16 no clear record was kept with respect to the amount
17 of digoxin used in any given ward and it is conceivable
18 in fact likely, that the unbalanced individual, who
19 killed the babies, had at least enough digoxin in
20 their possession to murder baby Justin Cook.

21 It must be recalled that this baby's
22 life could have been snuffed out with as little as
23 one adult ampule of digoxin. You know, because it
24 has been filed with you, as an Exhibit, that the
25 ampule in question is no more than one inch long and
far less than one half inch wide. It certainly is



1
BB-8 1 2 conceivable that this digoxin ampule could have been
3 kept in the possession of the persons wanting to do
4 that deed to Justin Cook long before the lock up of
5 digoxin.

6 Mr. Lamek contended to you that the
7 security measures put in place on the floor prevented
8 further deaths. Specifically, Mr. Lamek referred to
9 the secured digoxin, double signing for digoxin and
10 the presence of supervisors and the fact that the
11 digoxin level testing became routine.

12 Mr. Lamek suggested that these factors
13 likely made it impossible for the perpetrator to
14 continue without being detected. That is again
15 Volumn 148, Page 193.

16 The trouble is that we point out that
17 most of these measures, sir, were already in place
18 prior to the death of Justin Cook. In particular,
19 prior to his death, digoxin had been secured and
20 was supposedly locked with the narcotics in the
21 narcotic cupboard. Orders were made that nurses
22 were required to double sign for digoxin. The orders
23 were made, but certainly Nurse Bell said that she
24 didn't. The order was there and she did not.

25 I submit to you that that particular
night that Justin Cook died there was a greater awareness



1
2 by physicians and night supervisors, as to activities
3 on the ward that night.

4 Digoxin testing was occurring at that
5 point at a much more frequent rate. By that time
6 ante mortem and post mortem testing was being done
7 on any baby who was experiencing problems, if you
8 will remember. The very fact that extensive ante
9 mortem and post mortem testing was conducted on baby
10 Cook at the instigation of the staff physicians,
11 not the coroner, but the staff physicians at the
12 Hospital, clearly indicates this fact. It was as if
13 on the night Justin Cook died if the killer or killers
14 were daring the authorities to catch them.

15 Given all of that alleged important
16 security measures, it was if he or she was waving
17 a red flag.

18 I suggest to you that since baby
19 Justin Cook died after these precautions had been
20 adopted and apparently implemented in the ward there
21 must have been some reason, other than Mr. Lamek's
22 proposition number four, which caused the sudden
23 ending of the tragic baby deaths. We contend quite
24 simply, Mr. Commissioner, as we have in evidence before
25 this Commission, that there should be no question that
the baby deaths stopped when the coroner called in the



BB-10

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

police and the police commenced to investigate the matter, acting in conjunction with the coroner's office and the Crown Attorney's Office.

Mr. Strathy contended yesterday before you, sir, that when the police came in they immediately focused on homicide as being the answer, thereby causing everyone at the Hospital to do the same. We remind you, sir, that even before Justin Cook died the evidence is clear that Dr. Robert Freedom told a relative that someone was murdering our babies at the Hospital and how prophetic he was, before the death of Justin Cook, having said those words.

I submit to you that if a prominent cardiologist was thinking that way and in those terms it is ridiculous, as Mr. Strathy has suggested, that police officers with no medical training could influence and sway the views and findings of the physicians at the Hospital, as to what was really transpiring.

Clearly I think it is evident that those physicians were already thinking that way long before the police came into that Hospital.

We would agree with your Counsel's proposition that if you were to find that one death was caused, as a result of foul play, as Mr. Lamek



BB-11

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

has suggested, and I don't think I have heard anything to the contrary, except Mr. Strathy's comments about medication errors involving Justin Cook, but if you find that it was as a result of foul play then the inescapable conclusion, as to the large increase in the number of deaths, is related to further foul play by the same actors, you must follow -- that has got to follow.

There can be no doubt on the information that we propose to argue before you that Justin Cook died as a result of a deliberate overdose of digoxin while he was being given constant nursing care by two nurses now unnamed, following your edict, Mr. Commissioner, we would respectfully submit there are, in fact, seven other babies in addition to Justin Cook, whose death you can and should find were as a result of an intentional overdose of digoxin, causing digoxin toxicity.

In order to assist you in your deliberations, Mr. Commissioner, we have prepared charts for each of these eight children and each chart lists the following: The child's age at the time of death; the location of the child in the Hospital at the time of the onset of his or her critical symptoms; the date and time of day of the onset of



1
2 critical symptoms; the time of the day the child
3 was pronounced dead and our conclusions as to the
4 cause of death.

5 In our submissions we say that there
6 are four factors and five health disciplines which
7 provide the factual basis for that conclusion.
8 That is found in the evidence. The factors are the pre-
9 onset condition of the baby, the terminal events,
10 whether or not he or she was on digoxin, whether it
11 was prescribed, not prescribed, maintenance or other-
12 wise and whether there were ante mortem or post
mortem samples taken.

13 The health disciplines to whom you should
14 look for help in making your decisions, are founded
15 in toxicology, pharmacology, pathology, cardiology,
16 pediatrics, and to support our conclusions that these
17 babies died of digoxin toxicity caused by deliberate
18 administration of that medication, we have listed
19 the appropriate references in the charts which Mr.
Young and myself will shortly allude to will be listed.

20 It is my submission that a comprehensive
21 review of these nine areas of evidence proven before
22 you is essential to allow one to reach an ultimate
23 conclusion as to how and by what means these babies
24 died.
25



BB-13

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Having said that there are eight deaths caused by murders in the Hospital, we point out to you that the number of children, included in this review, would likely be larger if it were not for the unavoidable lack of evidence which surrounds the remaining 28 baby deaths you are required to examine. In particular, the lack of toxicology evidence prevents definite conclusions being reached with respect to many of the other children who tragically died in the cardiology ward.

Your Counsel have done an extremely comprehensive job in reviewing each of these baby deaths. We will attempt, not to repeat the evidence that bears upon our contentions that there were, in fact, eight murders during that nine month period.



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

C/RJR/ko

Because of the nature of our particular interest and mandate to the Metropolitan Toronto Police Force, we have taken a slightly different approach to the matter of truth. We do not talk in terms of suspicion. We do not talk in terms of innuendo. We have reviewed the evidence of this Commission. We have attempted to isolate the cases - the very clear cases - where it is clear beyond a reasonable doubt those children died at the hands of a killer, or killers, who were roaming the halls of the hospital during the period in question.

We submit that there can be no doubt on the proven evidence before you, Mr. Commissioner, that murders took place. To suggest otherwise is ludicrous in view of the overwhelming evidence to the contrary.

The evidence clearly shows beyond any reasonable doubt that eight babies were murdered within the hospital, Justin Cook, Allana Miller, Kristin Inwood, Kevin Pacsai, Janice Estrella, Jesse Belanger and Stephanie Lombardo.

We have not listed these babies in any particular order other than chronological order dealing with Justin Cook being the last to die in this nine month period.

Mr. Young will now deal with these eight eight babies in the order that I have indicated,



1

CC 2

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Mr. Commissioner, and following his review of the charts that we have prepared - and we have them somewhat reduced for you. As well, sir, I propose to provide some brief concluding remarks following his presentation of the evidence that we say there were eight murders.

Perhaps we can distribute that to all Counsel now.

THE COMMISSIONER: Yes. All right.

MR. YOUNG: I believe your Counsel already have a copy of the chart but I will provide you with one.

THE COMMISSIONER: We will make it as an exhibit, I guess. Number 426.

--- EXHIBIT NO. 426: Chart listing eight babies in chronological order.

MS. CRONK: May I just suggest, Mr. Young, that you may have to move it a bit more. We can see it very easily but I suspect the Commissioner might have some difficulty.

THE COMMISSIONER: Is that exactly the same one that I have before me?

MR. YOUNG: Yes, they are exact copies.

MR. PERCIVAL: I am told that I forgot



CC 3

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

one, and it is Jordan Hines, and it is included in the chart before you, sir.

THE COMMISSIONER: Yes. All right.

MR. PERCIVAL: Thank you.

MR. YOUNG: Thank you, sir.

THE COMMISSIONER: Yes?

ARGUMENT BY MR. YOUNG:

Sir, before I begin to review the charts, let me simply say that we intended a rather lengthy and detailed review of each of these eight children and, in fact, all of the 36 children; however, after hearing the extremely comprehensive job that Mr. Lamek did, we didn't feel that there was a need and we will try not to repeat our argument where it is the same as Mr. Lamek's.

I do propose to review these eight charts rather briefly, though, in order to hopefully anticipate and answer any questions that you or other Counsel might have.

Sir, let me start with Baby Justin Cook. This was a three month old child, sir, who was in Ward 4A, situated in Room 418. I think there can be little doubt that this child was stable prior to the onset of his critical symptoms. The evidence of Susan Nelles, the evidence of Dr. Rowe, Dr. Kantak,



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

all indicated that this baby was doing just fine - relatively fine prior to the onset of his critical symptoms.

Those critical symptoms, sir, could very easily be accepted by all, and in fact were accepted by most of the witnesses here, as being consistent with digoxin toxicity.

And you will see, sir, that we have listed references to each of these points. In particular, we have listed the volume number ... For instance, with respect of Dr. Fay's comments that these symptoms were consistent with digoxin toxicity.

We have listed Volume 67 "colon" and then the page numbers beside it. In some instances we have the charts listed or various exhibits with page numbers.

Moving along, sir. It is also quite clear that this baby was not prescribed digoxin. Yet rather large and, in fact, unprecedented levels were found in this child's system. And we have listed there for you, sir, the ante mortem references for the ante mortem levels and the post mortem levels. And the other refers to in this instance, as you well know, sir, they were samples taken from the IV



CC 5

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

line and tested with very, very low levels of digoxin being indicated as a result of those tests.

The evidence of the pharmacologists that we have had the privilege of listening to tend to indicate that there is little doubt this child died as a result of a digoxin overdose. There is certain evidence there, sir, based upon Drs. Kauffman, Mirkin and MacLeod to support a finding by you, sir, that this administration was intentional or deliberate.

Similarly, we feel that the cardiologists and pediatricians in this case - there was only one pediatrician, Dr. Costigan, who gave evidence here - but they all at one time or another held the view - and in most cases held the view when they testified here - that this child died as a result of intentional administration of digoxin causing digoxin toxicity.

As we well know, the pathologists who prepared the final autopsy report, Drs. Taylor and Cutz, shared that view when they listed the digoxin toxicity as the cause of death. They didn't come here to tell us that there was another cause of death, they came here to confirm that.

Sir, based upon all of this information, it is our respectful submission that you can and in fact should find that the cause of death for this child



CC 6

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

was digoxin toxicity resulting from an intentional administration of that very powerful heart drug.

I would propose to move on to Baby Allana Miller. Baby Miller died the day before Justin Cook. She was a 12 month old girl who was located on Ward 4A and in Room 423.

The onset of her critical symptoms, as with Justin Cook, in the early morning hours. In this instance it was 1:45 a.m.

Now; it wouldn't be correct to say that this child was stable prior to the onset of these critical symptoms. I think it would be more accurate to categorize her condition as being improved. And, sir, we would rely upon the evidence of various individuals, particularly Dr. Freedom and the nurses who were giving care to this child to support that contention.

You will recall that earlier in the day Dr. Freedom testified that this child had some chaotic heart rhythm, and as a result I don't think it would be fair to say that this child experienced - was stable just prior to the onset of these symptoms. However, later that evening, sir, as we all know, this child's condition worsened rather quickly, suddenly and unexpectedly. The symptoms that she demonstrated were quite consistent



1

2

with digoxin toxicity.

3

4

5

6

7

8

9

Unlike Justin Cook, this baby was on digoxin, and was on maintenance doses of digoxin, and she was receiving same. And it wouldn't have been surprising to find digoxin levels when they conducted the ante mortem and post mortem tests for this child. But what is surprising, sir, was the size of the levels found and, in fact, at that point those levels were considered to be unprecedented.

10

11

12

Sir, in fact, when Dr. Freedom heard of the digoxin level in Baby Cook his reaction was "Someone is killing our babies."

13

14

15

16

17

THE COMMISSIONER: It was Baby Miller.

MR. YOUNG: I am sorry. Baby Miller.

That was his reaction. When questioned further with that he said that something - he was of the opinion that something malicious was going on in the hospital.

18

19

20

21

Once again, sir, we believe that the inescapable conclusion in this case is that Baby Miller, a 12 month old little girl, died as a result of digoxin toxicity caused as a result of intentional administration of that drug.

22

23

24

25

We move on to Kristin Inwood, sir.

Baby Inwood was in Room 431 on Ward 4B.



CC 8

1
2 She was an 18 day old little girl and began to
3 experience her critical symptoms, as with the previous
4 two babies, in the early morning hours.

5 Dr. Kantak came to this Commission and
6 told us that this baby was stable when he saw the child
7 prior to the onset of these symptoms. And that, sir,
8 is how we came to the conclusion, as you will see on
9 the charts, that her pre-onset condition was stable.

10 Once again, sir, we are dealing with a
11 child here whose terminal events could be described
12 as being consistent with digoxin toxicity. And that
13 reference is Exhibit 3.4, of course, of the Atlanta
14 Report that, of course, supports that conclusion.

15 The samples of that child, sir, are
16 perhaps the most controversial. The real question
17 here is "Can we rely upon the levels of 499 nanograms
18 per millilitre?" - 491 nanograms per millilitre.

19 With respect to that sample,
20 Mr. Commissioner, we would adopt Mr. Lamek's view and
21 we would adopt his conclusion that in fact there is no
22 evidence to support a conclusion that this is not a
23 reliable sample. If you accept the 491 as being a
24 reliable - or as Mr. Lamek noted, as at least one
25 cardiologist did, if you even accept that as represent-
ing one-tenth of the actual level in this child, the



1
2 inescapable conclusion, once again, is that digoxin
3 toxicity was this child's cause of death and that it was
4 as a result of an intentional administration.

5 Kevin Pacsai is the next child that we
6 propose to discuss.

7 Once again, a baby who was stable.
8 This child was on Ward 4B and the onset of his
9 critical symptoms was at 4:00 a.m. on March 12th,
10 1981. Once again, sir, we see a child whose terminal
11 events were consistent with digoxin toxicity. All too
12 familiar a pattern.

13 Perhaps, the biggest difference between
14 this child and the children that I have reviewed so far
15 is that, here, is a baby with an anatomically normal
16 heart. There is little doubt, sir, that this child
17 was experiencing terminal events that can be described
18 as being consistent with digoxin toxicity.

19 The pathologist listed the cause of
20 death on this child's autopsy report as being digoxin
21 toxicity. And the pharmacological evidence that we
22 have heard, as well as evidence from cardiologists
23 and pediatricians, all seem to indicate that we are
24 talking about a digoxin overdose as being the cause of
25 death of this baby.

I refer you, sir, to Dr. Freedom's



1
2 evidence in Volume 30, page 5678, 5679, Dr. Rowe's
3 evidence in Volume 26, page 4793-4794, Dr. Fay,
4 Dr. Hastreiter, to support that conclusion. And once
5 again, that places us to this same conclusion that
6 once again we have a baby who died as a result of
7 digoxin toxicity through intentionally administered
8 overdose.

9 Like Kevin Pacsai, Jordan Hines had an
10 anatomically normal heart. On March 8th, 1981, young
11 Kevin, at 6:00 a.m. in the morning, began to experience
12 symptoms that proved to be terminal for him.

13 As Kevin Pacsai was, this young baby
14 was stable prior to the onset of these symptoms.
15 However, a distinction here is that this baby was not
16 prescribed digoxin. There wasn't supposed to be any
17 digoxin in young Jordan's system. And the real
18 surprising part is that when he was exhumed large
19 quantities of digoxin were found in his tissues.

20 Sir, we are faced with the question
21 in this case, the key question is why was digoxin found
22 in the exhumed tissues of this young baby? And, as
23 Mr. Strathy did earlier, I would refer you to
24 Dr. Kauffman's evidence. Both in his report and in
25 Volume 83, page 8143, where he said that he thinks it
is highly unlikely that this baby, Baby Lombardo, Baby



CC 11

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Cook and Baby Belanger, all received digoxin accidentally. You will recall, sir, that none of these babies were prescribed digoxin and of course all of these babies tragically met their deaths on the cardiology ward during the epidemic period.

According to Dr. Kauffman, the administration of this drug was likely a deliberate one in each of these four instances. He supplied that view when he prepared his report. He felt that -- he testified here, sir, that that remained his opinion when he prepared a supplementary report in January of 1983. And, sir, when he was asked here by one of your Counsel, Ms. Cronk, if that was his opinion on that day - the date that he testified - he said "Yes, it is". So, that remained his opinion.

So, it is our respectful submission, sir, that that administration was an intentional one and that in fact that was the cause of death.

The question, sir, of SIDS explaining this death was also discussed by Dr. Kauffman in Volume 83, page 8058, and we feel that at that point the doctor quite comprehensively discussed the matter and discounted SIDS as not explaining this particular baby's death.

Once again, sir, the conclusion is the



CC 12

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

same: Jordan Hines was murdered. And he was murdered with digoxin and that drug was intentionally administered.

Baby Janice Estrella was four months old when she met her death. Once again, sir, we are dealing with a stable child who experienced - began to experience her terminal events in the early morning hours. Before I discuss the events that occurred on January 11th when she tragically met her death, let me go back four days on January 7th.

- - - -



DD-1

EMT/hr

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

On January 7th this child arrested, again, in the early morning hours. A code 25 was called as a result of an episode of marked bradycardia. A digoxin level was taken and it was found that this child had a rather high digoxin level. It was recorded as greater than 4.7 and it was unrecorded as far as computer print-out was concerned - unrecorded level of I believe 9.4.

So we heard from Dr. Rowe, Volume 16, page 2697, 2701, same volume, Dr. Rowe testified that the evidence that Janice Estrella -

THE COMMISSIONER: I am sorry, before you go on. Yes, I guess you are right, it was greater than 9.4. I think that was the reading on January 7th. On January 8th it was 7.8. Am I not right on that ?

MR. YOUNG: That is right. I believe it was assayed on the 8th. The 7th sample was reassayed on the 8th.

THE COMMISSIONER: Was it?

MR. YOUNG : That only serves to confuse the issue. Your interpretation, sir, was quite right.

THE COMMISSIONER: Yes. All right.

MR. YOUNG: Sir, in view of what we now know occurred at the hospital subsequently, in view



DD-2

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

of the tragic events surrounding the death of Justin Cook and Allana Miller, Jordan Hines, Kristin Inwood, we would submit to you, sir, that you can and should find that whoever these killer or killers were successfully attempted to take this child's life on January 7th . There was a successful resuscitation at that point in time, and I might add my understanding is that it was the only successful resuscitation that occurred on that ward over that epidemic period.

THE COMMISSIONER: I know we had this out before. This was evidence I believe of the nurses. The nurses were asked if they had any -

MR. YOUNG: It was called a respiratory arrest I think by Nurse Trayner as opposed to cardiac arrest. I think that was the distinction.

THE COMMISSIONER: No, but what I was thinking about, my recollection is and I don't know that I have seen it anywhere but my recollection is the nurses were asked if there were any such successful resuscitations other than Estrella -

MR. YOUNG: Yes, sir.

THE COMMISSIONER: - on their tour of duty, and I thought the answer to that was no.

MR. YOUNG: That is what I am saying as well, sir. That was the only successful resuscitation,



DD-3

1

2

I quite agree. I don't know of any other evidence
indicating further successful resuscitation.

3

4

THE COMMISSIONER: Well, I may be
wrong. I think there was evidence that there was
none from the nurses -

5

6

MR. YOUNG: Yes.

7

8

THE COMMISSIONER: There may well have
been successful resuscitations with other teams but
not with that team.

9

10

MR. YOUNG: Yes, sir. I quite agree .

11

12

13

14

15

16

17

18

MS. CRONK: Sir, I hesitate to
interrupt my friend's argument and wouldn't normally
do it. You are absolutely right. There is evidence
in the case on Francis Volk I am told that there was
a number of code 25's called when different nursing
teams were on duty and the child was resuscitated
on three different occasions before the final events
which led to his death. That is just an example
that springs to mind.

19

20

THE COMMISSIONER: Were not some of
nurses asked if they had any recollection -

21

22

MS. CRONK: In their experience, that
is quite right, sir.

23

24

25

THE COMMISSIONER: And the answer was
no?



1

2

MS. CRONK: These were different
teams in the case of Francis Volk.

3

4

MR. YOUNG: I thank my friend for her
assistance.

5

6

7

8

9

10

11

12

13

14

15

16

17

Sir, as I said we feel that you can
and should find that a killer or killers attempted
to take this child's life on January 7th. They failed
and for four days digoxin was held, and as we
discussed earlier, sir, the digoxin level of this
young infant declined as one would expect it would.
However, on January the 11th, in the early morning
hours once again, sir, this child once again arrested.
Another code 25 was called for this previously
stable child, and as on the 7th of January this child
exhibited symptoms that could be described as being
consistent with digoxin toxicity. Unfortunately,
sir, on this occasion the baby did not survive and
expired on that date.

18

19

20

21

22

23

24

25

As in the case of Kristin Inwood, sir,
we are here faced with a digoxin level that some
have called unreliable. And, sir, I'm not going to
go through all of the evidence again. It seems clear
to me and it appears to be clear to Mr. Lamek in his
submissions as well, and in fact, ironically to
Mr. Sopinka, that the gutter blood study only served



1
2 to confirm the accuracy of that level. I would simply
3 adopt the submission of my friend, Mr. Lamek on that
4 point rather than repeating it.

5 Again, sir, Dr. Mirkin espoused that
6 view and if one is to accept that both logical and
7 what we believe stronger interpretation of this
8 level, I think you are faced with an unavoidable
9 conclusion that this baby too died as a result of
an intentional overdose of digoxin.

10 The case of Jessie Belanger, sir.
11 Jessie was a patient on Ward 4B; was situated in
12 Room 431 on the day that he died. This child was
13 42 days old and, sir, once again prior to the onset of
14 the terminal events for this child all of the evidence
indicates that this child was stable.

15 The terminal events that I just mentioned
16 were consistent with digoxin toxicity, but here as
17 in the case of Baby Hines and Baby Cook we are faced
18 with a baby who was not prescribed digoxin yet
19 digoxin was found in the tissue of this child after
20 exhumation.

21 Sir, I can do no better than to refer
22 back to the evidence that I earlier read to you from
23 Dr. Kauffman in Volume 83 where he included this
24 child in saying that it is very unlikely that these
25



1
2 babies received an accidental administration of
3 the drug digoxin. It is quite likely that this drug
4 was deliberately administered.

5 Sir, that supports us in our conclusion
6 that we feel, an inescapable conclusion that this
7 baby too died as a result of an intentional administration
8 of digoxin.

9 Finally, sir, Baby Stephanie Lombardo
10 died five days earlier.

11 Sir, I say that you will be hearing
12 a lot about Baby Lombardo over the next few months.
13 The death and subsequent autopsy figured prominently
14 in the preliminary hearing and will likely figure
15 prominently in Phase II. That's a foreshadow.

16 This 10 day old infant wasn't on
17 digoxin. The infant was stable prior to the onset
18 of the critical symptoms, and I think we all remember
19 the graphic detail that Nurse Bucci related to us
20 about just how well this baby was doing. It was
21 feeding easily and seemed quite stable until the
22 terminal events of this child began and these terminal
23 events as I mentioned were consistent with digoxin
24 toxicity.

25 Once again we have a baby that was not
prescribed digoxin, and we are faced with the same



DD-7

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

question, how did this drug find its way into the tissue of this child? I can do no better than once again, sir, referring to Dr. Kauffman.

Sir, before leaving this baby let me simply address a point that my friend Mr. Strathy brought up yesterday. He suggested or my understanding was that he was inferring that there was something lacking in the police investigation or the coroner's job because no formal full autopsy appeared to have been conducted on this young child.

I would submit to you, sir, that unfortunately when this child was exhumed 14 months later no autopsy could have been - no full autopsy could have been conducted on this child. Because of decomposition that takes place all that could be done was the taking of a sample and that sample was taken, was tested and produced a digoxin result.

THE COMMISSIONER: It wasn't determined whether the shunt was patent or not and that I take it could have not been determined.

MR. YOUNG: Sir, it is my understanding that could not have been determined. If you feel it necessary to hear evidence with respect to that matter in the second phase, that's fine. Perhaps a letter or other affidavit evidence might be produced



DD-8

1
2 to you if it is felt that it is necessary. But it
3 is my understanding that the doctor who performed
4 the post mortem examination - it wasn't a full autopsy -
5 but the doctor who performed that examination could
6 not have made that determination. Without going into
7 detail, sir, I don't think there is any reason to
8 suspect that the doctor or the investigators were
9 doing anything less than they could have.

10 THE COMMISSIONER: I am not sure that
11 they were asked by anyone to do a full autopsy.

12 MR. YOUNG: Sir, I think the doctors
13 and the coroners and the police, they are a lot more
14 familiar with these matters than we are and I think
15 they were well aware that they just couldn't get
16 those sort of conclusions from a baby who - the other
17 point, sir, if I may, I just don't know whether they
18 asked or not.

19 THE COMMISSIONER: My suspicion, and
20 I shouldn't have suspicions perhaps, the police and
21 the coroner had no idea that the position of the
22 hospital was at that time that the shunt was occluded
23 and therefore, not knowing, they did examine the body,
24 but they never bothered their heads to see - or if
25 they couldn't have done it any way no harm was done.

MR. YOUNG: That's right.



DD-9

1
2 THE COMMISSIONER: But I don't know
3 whether we should blame anybody for that lack of
4 communication because I am not all sure that it
5 was encumbant upon either the police or the coroner
6 to check or for that matter for the doctors at the
7 hospital to tell them.

8 MR. YOUNG: Sir, I point is certainly
9 no blame should be attributed, and in particular, sir,
10 I repeat that nothing could be done. Nothing could
11 have been done so there was no point in making any
12 inquiries. I am sure that the doctors would have
13 supplied that information if they had it available.

14 Sir, as I mentioned our conclusion
15 with respect to this baby is the same. We respectfully
16 submit that you can and should find that Stephanie
17 Lombardo died as a result of an intentional administration
18 of the heart drug digoxin.

19 Before concluding, sir, let me say
20 that we considered including Baby John Onofre on this
21 list.

22 There is a great deal of evidence to
23 demonstrate that Baby Onofre died as a result of
24 digoxin toxicity. That may well be listed as the
25 cause of death and should be listed as the cause of
death. We didn't because that baby - there wasn't



DD-10

1

2

3

4

quite enough evidence to support a contention that that administration of digoxin was intentionally administered.

5

6

7

8

9

It may well be, sir, that you can find that. I think there is sufficient evidence without going into a lot of detail to support a finding that digoxin played a part in this young child's death, but for that reason we did not include this baby in our list of babies.

10

11

12

Sir, that concludes my review of these children, and with your permission, Mr. Percival will continue.

13

14

THE COMMISSIONER: Yes. Thank you.
Thank you, Mr. Young.

15

16

17

18

19

CONTINUED ARGUMENT BY MR. PERCIVAL

MR. PERCIVAL: Mr. Commissioner, we began our submissions by stating that it is clear that many of the children we are examining tragically meant their death as a result of the deliberate administration of digoxin.

20

21

22

23

24

25

Quite apart from other counsel at this inquiry who share that view, we point out that the Atlanta Centre for Disease Control Report similarly concluded that the increased occurrence of deaths from July 1980 to March, 1981 resulted from



DD-11

1
2 the purposeful administration of digoxin overdoses
3 through intravenous lines. That is Exhibit 324,
4 page 28.

5 Prior to the issue of the Atlanta
6 Report numerous experts were invited by the Metropolitan
7 Toronto Police Force to meet at the Hospital for
8 Sick Children on September 13th, 1982. Included at
9 that meeting were coroners cardiologists, toxicologists
10 and officers from the homicide squad at that meeting
11 certain deaths were categorized as being natural,
12 suspicious, probable murder and murder. The results
13 of that categorization are found in Exhibit 261 and
14 should be considered by you, Mr. Commissioner, in
15 making your deliberations.

16 We also remind you, Mr. Commissioner,
17 of the existence of the reports, the actual written
18 reports of Drs. Kauffman, Hastreiter and Fay which
19 reports already have been filed as exhibits.

20 All of these medical reports it is
21 important to note were created prior to the inception
22 of this Commission, and all of these reports indicate
23 the inescapable conclusion that babies were deliberately
24 murdered at the Hospital for Sick Children.

25 This is the same conclusion I point out
to you, Mr. Commissioner, that was reached by the



DD-12

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

officers with the Metropolitan Toronto Police Force in March of 1981, and at that time the officers quite correctly came to the conclusion that certain babies admitted to the Hospital for Sick Children were murdered.

After a relatively short period of analysis the officers concluded that foul play occurred. You will have no trouble we submit, coming to the same conclusion after 146 days of exhaustive trial evidence.

In making our submission we tell you that one cannot avoid the obvious as difficult as it may be to accept. It is obvious we submit that there were killers employed in the cardiology ward of the Hospital for Sick Children during this nine month period. While it may never be capable of proof beyond a reasonable doubt in a court of criminal justice, there was clearly no stranger loose in the ward putting these babies to their deaths. A terrible paradox of this tragedy I suggest to you bears repeating: the babies died and the parents continue to suffer untold anguish. Baby killers have survived and remain free.

.....



1
2 Many dedicated physicians and hospital personnel
3 cannot forget the horrible period of increasing,
4 unexplained baby deaths. The reputation of a world
5 renowned hospital is tarnished, but the Hospital will
6 live on. The Hospital will continue to give the
7 level of health care second to none in the world.

8 While some in this Commission may
9 blame the Hospital staff for not reacting earlier
10 the question surely remains: How could a Hospital,
11 devoted to saving lives protect itself against killers
12 in its employee, who were bent on the destruction
13 of little babies who were vulnerable, defenceless,
14 and could never name names.

15 You have a difficult and some say it
16 is an impossible task to make findings of fact as
17 to how these babies died, sir. While your findings
18 and your report will never bring these babies back
19 to life, you may finally provide the answers to
20 those 72 anxiously awaiting parents.

21 Thank you, sir.

22 THE COMMISSIONER: Thank you, Mr.
23 Percival.

24 Ms. Kitley, what is your wish?

25 MS. KITELY: I am ready, sir. I
would prefer to start after the break so that we



1

2

could move the lectern down.

3

THE COMMISSIONER: We will break for
twenty minutes.

4

--- Short recess.

5

--- On resuming.

6

THE COMMISSIONER: Yes, Miss Kitley.

7

Do you have something?

8

MR. OLAH: Yes, I find myself in a
predicament tomorrow, sir. I have to be elsewhere.
It is one of those situations that one of our members
often find themselves in. I have spoken with my
friends and they have obliged me by preceding me
Mr. Labow and Mr. Shanahan and Mr. Shinehoft. If I
may I will be prepared to proceed on Thursday morning
if that is acceptable to you, sir.

10

11

12

13

14

15

THE COMMISSIONER: Yes, all right;
thank you. I take it that Counsel, the parents
have guaranteed to last the whole day, have they?

16

17

18

MR. OLAH: I don't know about those
kinds of guarantees. I am not even sure of the
warranty, but I am hoping.

19

20

THE COMMISSIONER: Well, we will sort
it out somehow.

21

22

MR. OLAH: I am sure Mr. Tobias will
manage.

23

24

25

EE/2



EE/3

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

THE COMMISSIONER: I will keep that from him.

Yes, all right, Miss Kitely.

ARGUMENT BY MS. KITELY:

Thank you, sir. Mr. Commissioner, we have prepared written submissions and I can pass them out to my friends who have lasted through the day. The copy before you has a tab on it, a gold tab, which is meant to be able to take it apart and there is a reason for that, sir. It is not my intention to review all of these pages, otherwise I would never meet the time constraint which I have imposed upon myself, which is roughly half a day. The part that I intend to refer to orally, sir, is up until the first blue page. There are two of them.

THE COMMISSIONER: Yes, all right.

MS. KITELY: What follows the blue pages, sir, are two appendices. Appendix number 1 is meant to describe generally certain medical and nursing hierarchical and organizational aspects.

You will note, sir, that there is an index at the beginning and the page numbers are reference to the page numbers in and Appendix itself. You'll see, sir, that there is a description of the nursing hierarchy, ward size and type, nursing



1
2 positions and functions, followed by staffing on
3 4 A/4 B and certain elements with respect to patient
4 care, medical services on the next page and emergency
5 procedures and lines of communication.

6 What we have done, sir, is an attempt
7 to bring together an assortment of references which
8 we feel might be of some use to you in terms of tracking
9 down background information.

10 In each case you will see that there
11 is a paragraph or two of information followed by
12 references, and by way of example on Page 2, there
13 is a reference at the top to Agreed Statement of
14 Fact and thereafter it is referred as ASF. Then page
15 and paragraph number.

16 Now, the witnesses then referred to,
17 if that is the case, and in some instances you will
18 see that there is an exhibit number. You will note,
19 sir, that this goes on for some 27 pages and we have
20 covered what we hope are the basis in terms of general
21 background material. We have tried, to the best of
22 our ability, to give you accurate references in
23 each of these cases and should we come across any
24 that are inaccurate we will most definitely let you
25 and my friends know.

Could I then ask you, sir, to go to



1
2 the second blue, Appendix No. 2, and what we have
3 done, sir, is following the lead of Miss Thomson
4 and Miss Chown, who have prepared medical observations
5 with respect to the patients, we have prepared nursing
6 observations.

7 Now, you can tell, sir, by looking
8 at the few number of pages in the second part of
9 the blue part, that we have not been in a position
10 to do all of the patients. We have chosen seven and
11 they are the seven, about whom there has been most
12 discussion and I think it is Inwood that is absent.
13 Otherwise, we have tried to set out by witness the
14 nature of the evidence that was given. Again because
15 there are so many references to the material we have
16 tried to be as accurate as possible.

17 Could I ask you, sir, to look to Page
18 2 of this Appendix. By way of an example you will
19 note there is a reference to the tour end report
20 and where there was a reference to the particular
21 patient we have inserted it in this summary.

22 THE COMMISSIONER: Yes, all right.

23 MS. KITELY: It is not my intention,
24 sir, with one exception, and that is with respect
25 to Cook, which is in the second Appendix. It is not
my intention to mention any of those other matters



EE-6

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

before you. It is, however, my intention to deal with the first part of these written submissions up until the first blue page and I hope, quite frankly, sir, to do it in much the same way as my friend, Mr. Sopinka, did and that is to refer you to it, but not read to it unless the parts are of particular significance.

THE COMMISSIONER: Yes. Should we make this an exhibit, too?

MS. KITELY: I was hoping, sir, that the Appendices would certainly be, and perhaps Commission Counsel would find a way to delete Appendix 2 and actually stick them into their binder that Miss Thomson has prepared for you. Otherwise I am in your hands whether you make the entire matter an exhibit or not.

THE COMMISSIONER: We will just make it an exhibit and then if we want to detach something and put it someplace else we can do that. Is that alright?

MS. KITELY: I am in your hands, sir.

THE COMMISSIONER: 427.

--- EXHIBIT NO. 427: Submissions by Ms. Kately.



1

2

THE COMMISSIONER: Yes, all right.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MS. KITELY: Mr. Commissioner, I am mindful of having heard from Mr. Percival this afternoon that if one takes a position contrary to the facts which he espoused this afternoon, that it is somewhat ludicrous, I believe is the word he used, and I must say by way of introduction that I intend to take a position, which is quite different to his. Therefore, in his view, ludicrous and I will ask you to bear with me nonetheless.

THE COMMISSIONER: Not to laugh too loudly?

MS. KITELY: Not to laugh too loudly, sir, at least until I have left the room.

Mr. Commissioner, I have set out in the introductory part of my submissions the nine guidelines that Mr. Scott referred you to or at least my understanding of the nine guidelines. Could I say by way of general comment that it is our submission that those are guidelines which you ought to very seriously consider.

I have comments, sir, with respect to Number 3, being the matters about which you will report and I will deal with that at the end of my submissions.



EE-8

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

The other matter which I would like to address at this point, sir, is Number 2 and I am describing that, sir, as the burden of proof issue.

In my submission, you have heard from a number of people what are the possibilities that are open to you and it is ours that there are four: Firstly, that the death is attributable to natural causes; secondly, that it is attributable to a deliberate administration of an excessive dose of digoxin; thirdly, that it is attributable to the involvement of medications, including an accidental administration of digoxin or some other drug, and including an idiosyncratic reaction to a drug; and fourthly, one of the very great possibilities open to you, sir, is that the death is not attributable to any known cause.

There is, in my submission an absence of judicial authority about the burden of proof which you ought to guide yourself by in making a determination.

The Public Enquiries Act doesn't help us at all. In my submission that then falls us back on the traditional burden of proof and Mr. Scott's submissions in that connection. The question is do you apply the civil burden on the one hand, the criminal



1
2 burden on the other hand, or something in between.

3 It is our submission, sir, that the
4 most guiding principle you must look to is the
5 consequences of your report and where the consequences
6 are very serious, it is our submission that the
7 burden of proof or the standard of proof is increased.

8 My friends, Mr. Ortved and Mr. Scott,
9 referred you to the Bernstein decision and I have
10 referred to it on Page 3 of my submissions, sir.
11 At the risk of refreshing your memory that is already
12 freshed, this was a case where a physician
13 in a discipline hearing with having sexual relations
14 with a patient. He took the stand and denied
15 vigorously any such allegations. The Court considered
16 that the proceedings were penal in nature and that
17 there would be grave consequences for the doctor.

18 Looking at the quotation, in the
19 middle of the page, sir, Mr. Justice Laskin, at that
20 time, and I quote:

21 "A man's professional reputation,
22 threatened by allegations of misconduct
23 against which he pledges his credit
24 as a witness, should be upheld unless
25 there is very strong evidence shattering
his defence of that reputation."



EE-10

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

It goes on with Mr. Justice Garrett:

"... that the proof must be clear and convincing and based upon cogent evidence..."

I then refer, sir, to the Decision of the Supreme Court of Canada in the Continental Insurance Company where the Court and I am quoting, says:

"Where there is an allegation of conduct that is morally blameworthy or that could have a criminal or penal aspect and the allegation is made in civil litigation, the relevant burden of proof remains proof on balance of probabilities."

Going on to the next page, sir, and I don't intend to quote, because I have inserted the quote at the top of the page, again from the Decision of the Supreme Court of Canada, this time with reference to Bater and Bater.

Sir, in looking around for assistance, with respect to a burden of proof, I had occasion to look at a matter in which you were previously involved and that is the report of the Mississauga Railway Accident Enquiry. I found in reviewing that, sir, that there are portions of your report which, in my



EE-11

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

submission, are helpful in the decision that you have to make with respect to the guidelines, which you ought to follow.

One problem about written submissions is you now know exactly where I am going, sir, but let me say that I am cognizant of the fact that you were then dealing with trains and we are dealing with a hospital. Your terms of reference, which I have read, sir, were quite a bit wider than the scope or terms of reference that we have before you, but nonetheless, it was a public enquiry, as is this, and it was a matter of public concern, as is this, and I commend to you the reasoning that you applied in that particular situation.

Now, it is with some hesitation that I refer to the enquiry, because it is quite clear that you know a great deal more about trains than I do.

THE COMMISSIONER: Not now.

MS. KITELY: Not now?

THE COMMISSIONER: I did once.

MS. KITELY: I read the report and I am sure you still know a lot more about trains.

THE COMMISSIONER: I hope in a couple of years I will forget about digoxin, too.



EE-12

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

MS. KITELY: At any rate, sir --

THE COMMISSIONER: I now know, at least I think I still remember which end is which of a train, but I'm not sure.

MS. KITELY: Well, then that maybe puts us on an even keel, sir.

At any rate, having put all of those qualifiers together I noted with interest, sir, the excerpt which I have inserted on Page 4 of my submissions to you. This is a direct quote from Page 46 of your report and I always thought that a highball was drink, but I gather a highball is something quite different when one is dealing with trains. At any rate, on Page 46 you refer to this conversation, which I gather had come from a rather garbled transcript between the top and the bottom on the train or the head or the tail or whichever it is one wants to call it. The underlining, sir, on Page 5, is mine and I noted with great interest, that you took those six excerpts and you said, sir, that it is possible to infer certain things from these excerpts, but it is not possible to include certain things from the excerpts.

You go on later, sir, and say, and I'm quoting you to yourself:



EE-13

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

"I can only regret that the inadequacy of the equipment and the total lack of uniform language requirements in the communications, makes it impossible for us to determine the precise facts."

If I can go one step further, sir, and indicate to you as I have in my submissions, that this is exactly the approach that Mr. Scott has suggested to you and which I fully support.



FF-1

JR/hr¹

2 That the evidence may allow you to draw certain
3 inferences. And by the evidence, I'm now mindful
4 of the patterns of which about which we have heard
5 so much. But just because you might be allowed to
6 draw a certain inferences, sir, does not mean
7 necessarily that you ought to draw certain conclusions.

8 Could I then, sir, address the
9 recommendation number 11 of the Railway Inquiry
10 Report... and I do that for this reason. One of the
11 concerns that you raised when you had heard submissions
12 from Mr. Scott was that your function was to try and
13 find an answer; that that was your job when you had
14 your judicial hat on and it is still your same job
15 today without your gown.

16 I found recommendation 11 of the
17 inquiry most interesting because in that one you
18 recommended, as set out in the bottom of page 5,
19 that certain research be conducted by Transport
20 Canada. And for purposes of my submission, I have
21 itemized them but clearly the research on trains doesn't
22 matter with the research that we have to deal with.

23 In your comments, sir, at the top of
24 page 6, again which I have underlined which I find
25 most informative, and I quote:

"I can only regret that I am here doing



1

2

what I have complained of in other matters
i.e. making recommendations for further
study..."

3

4

5

THE COMMISSIONER: That is not in
other matters. In others.

6

7

MS. KITELY: In others. I am sorry.

8

9

10

11

THE COMMISSIONER: I think I did
complain, as I remember, about certain functionaries
not taking - not citing matters - and these are
matters that I couldn't decide myself, so I thought
the least I could do was explain myself if we are --

12

13

MS. KITELY: But you go on, sir,
to say:

14

"The matters listed..."
Which is A. K:

15

16

17

18

19

20

"... a real problem to which I do not
have the answers. I can only hope
that these answers will be forthcoming
shortly and where the answers dictate
affirmative action that such action
will be taken immediately."

21

22

23

24

25

With the greatest of respect, sir,--
THE COMMISSIONER: I did, though, make
some decisions in the course of that. I am not too
sure what they were or what they were or whether they



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

were followed, but I did make them.

MS. KITELY: You made an enormous number of recommendations about speed and size and hot boxes. Hot boxes, I think I have a general concept of what they are. Everything else, I have some difficulty with.

The point is, sir, however, is since you expressed this difficulty when you were hearing from Mr. Scott about having to find a solution, I was wishing, with the greatest of respect, to remind you that there is a precedent in which you are unable to come to such a decision.

THE COMMISSIONER: Yes. All right.

No, I commend you. There is nothing like throwing it in the teeth about the author but at least things were a little bit different in Mississauga. I was asked to find out what happened and that took me exactly five minutes on the first day to find out it was a hot box and then to make recommendations so it wouldn't happen again. But I made - I did find out that it was a hot box after a 100 days . It didn't change my view on that, but what caused the hot box and what we should do to prevent it from happening again is what took the rest of the 125 days, or something. But these ones, though,



FF-4

1

2

3

4

are ones that were put to me as proposals but I wasn't able to deal with all of them ... but I did deal with quite a few.

5

MS. KITELY: You did.

6

7

8

9

10

THE COMMISSIONER: I just didn't through up my hands in despair and say, "I really don't have any answers to this", because one side says one thing and another side says another thing. However, as I say, I commend you for finding something to throw at me that I wrote myself.

11

12

13

14

15

MS. KITELY: I wouldn't want to leave any suggestion that you hadn't made some very straight forward and substantial recommendations. In fact, it was only this one to which I am referring that indicated that there ought to be further steps. Quite obviously, the rest had great continuity.

16

17

18

19

20

21

It is our submission, sir, that Mr. Scott's submission to you that there may not be answers is one that you ought to very seriously consider. And as difficult as it may seem that you may have to come to the conclusion that there aren't answers to many of the questions that were put before you.

22

23

24

25

Might I say, before moving on to the next page, sir, which is page 7 and the heading that I have called it, "Evidentiary considerations". Before



FF-5

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

I get to that, might I state generally our position on the 36 babies - I am putting together Cook, Pacsai, Miller, Inwood, Hines, Lombardo, Belanger, and Estrella.

THE COMMISSIONER: Those are --

MS. KITELY: Those are the usual eight. And I am suggesting to you, sir, and I already have, that there may well be insufficient evidence for you to determine with the full measure of assurance which Mr. Scott suggested to you that whether the death was due to one of the four causes - one of the three causes that I have set out above and therefore the fourth possibility becomes real.

I will not be making comments about all of the specific babies. With respect to those eight, I will deal with Hines, Lombardo, Belanger as a group. I wish to make one point about the toxicological evidence and I will deal briefly with Estrella and briefly with Cook. So, if we break it down that is really, three, sir. By the time you get to the end of the table you are going to be down to one each.

With respect to the other babies, the 28 of the 36, we agree with the submissions on behalf of Mr. Scott.

Now, sir, if I could ask you to look



FF-6

1
2 at page 7 you will see that there are five areas
3 that I am going to travel through and I hope to go
4 through them reasonably quickly although, quite
5 frankly, I won't get done with all of them today.

6 Dealing with the medical evidence -
7 and might I say in parenthesis, sir, I am dealing
8 in generalities at this part of my submission.
9 I recognized that Some of my friends have dealt in
10 great specifics with some of the children and it is
11 my intention to bring back an over view.

12 With reference to the medical evidence
13 sir, the purpose of pages 7 and 8 are to remind you
14 of a non-specificity of many of the symptoms. What
15 we have done on these pages is simply list the symptoms
16 about which we have heard so much and give you a
17 reference about their consistency, or lack thereof ,
18 with digoxin intoxication.

19 I have noted at the bottom of page
20 8, sir - and I am saying this with all of the experts -
21 have agreed that the symptoms of digoxin intoxication
22 are not specific.

23 If I refer you to the top of page 9
24 with reference to Dr. Kauffman's evidence at the
25 Garry Murphy Inquest where he said, and I quote:

"Signs of digoxin intoxication in



FF-7

1

2

3

4

5

6

7

8

Freedom, sir:

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

infants are rather non-specific, and usually are symptoms due to other factors, in a clinical situation, it is difficult to be certain whether a specific symptom is due or not due to digoxin."

And further, with respect to Dr.

"There are no symptoms indicative of digoxin intoxication that would rule out any other cause of death."

And the next paragraph, at the end Dr. Fay told the Commission that all of the symptoms that we have listed are consistent with but not necessarily indicative of digoxin toxicity.

We refer, then, sir, to the evidence of Dr. Rowe and if you remember he was taking us through in some detail that while the symptoms are specific are symptomatic of digoxin toxicity, they are also symptomatic of a number of other situations, I have listed them with the page references.

It is our submission, sir, that the presence of many of these symptoms in a child's terminal course is not clear, nor convincing proof, that the child was indeed a victim of deliberate



FF-8

1

2

overdose of digoxin.

3

If I might turn to the next page, sir.

4

It is our submission that really if there is any

5

thing that we have learned is that medical knowledge

6

is neither black nor white but many various shades

7

of grey. The area cardiologists --

8

THE CHAIRMAN: That is life, as well.

9

MS. KITELY: It is, sir, but in life
and Royal Commissions are a little bit different.

10

The point of this, sir, you may not

11

find black and white. You may find greys and that is

12

where you find the no answers.

13

It is our submission that science is

14

moving literally on a daily basis and it could well be

15

what is uncertain today may be certain in the future.

16

If we could all last that long enough, we might be able to

17

have some more evidence to finish it off. But to finish

18

the inquiry and the job you are asked to do, sir,

19

you may not given the medical evidence to be in a

position to answer some of the questions.

20

If I could move, sir, to the

21

pharmacological evidence. If you will recall, Dr.

22

Spielberg was the witness that took to the blackboard -

23

and it was on a Monday morning - he pretended he was

24

a lecturer and we were pharmacology 101 students, and'

25



FF-9

1
2 it was a most enlightening lecture and it was a very
3 effective way - and I commend Mr. Lamek to have done
4 it, on that occasion to allow the method to be gotten
5 across.

6 As I recall, as I re-read the transcript,
7 there was even some questions from the floor as if
8 some of us were so into being students that we had
9 no compunction about asking as Dr. Spielberg went
10 along. However, since Dr. Spielberg was the first
11 to give us this kind of very basic information, and
12 since so much of the complicated evidence came later
13 on, it is my submission that you want to go back to
14 basics, that Dr. Spielberg had some very important
15 things to say. Much I have taken the liberty, sir,
16 of quoting from several passages. I simply want to
17 highlight them to you so that you can understand what
18 we have done.

19 There is some quotes. Then, if you
20 go back to the margin there is a paragraph, or
21 textual material, and those are our comments.

22 Dealing with the speculative nature
23 of some of the evidence that we have, sir. In
24 Volume 54, there is a reference in the middle of that
25 quotation. Perhaps it would be easier to start at the
beginning:



FF-10

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

"Of practically all of the drugs we commonly use in pediatrics, the kinetics of digoxin are probably the most complicated ... for many compounds there is a ... reasonably straight forward relationship between the blood level of a drug and either the way the drug acts; the reason that we are using the drug; or its toxicity. Well for digoxin, this is not a simple case. It is tremendously complex... we must deal with some of the complexities because to either trivialize or ignore it it can lead to tremendous risk of interpreting numbers."

Dealing with the next quotation, sir, Dr. Spielberg gave us our introduction to that concept of half lives which I would assume most of us eventually figured out, but it was somewhat confusing. And he hypothesized that a half life, the range in the literature was between 20 and 60 minutes, and that five half lives would constitute full distribution.

Can I point out, sir that throughout the course of many of the samples we have dealt with, a half life of 30 minutes - in other words, at the low



FF-11

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

end of the half life range - and I would simply wish to point out, as I have at the top of page 5, sir, that if you take five half lives at 30 minutes, that is two and a half hours and that is consistent with many of the hypotheticals.

If, however, you take five half lives at 20 minutes, sir, which is at the bottom end of the literature range, then it is an hour and two-thirds. If, on the other hand, you take the half life of an hour, which is the top end of the range, you are talking six hours.

So, while we consistently delve with two and a half, I would ask you, sir, not to lose sight of the fact that there is a range between one and two-thirds and six hours.

THE COMMISSIONER: This is the alpha stage?

MS. KITLEY: That is right, sir.

THE COMMISSIONER: They used the six hour figure as the time for taking --

MS. KITLEY: Taking --

THE COMMISSIONER: Taking the levels?

MS. KITLEY: Yes.

THE COMMISSIONER: Because if it is at the top of that range it is 60 minutes.



1

2

MS. KITLEY: That is right, sir.

3

But the way that this came to be so relevant, sir,
4 was that many of the examples of time dose in route
5 there was a reference to five half lives at roughly
6 30 minutes.

6

THE COMMISSIONER: Yes?

7

8

MS. KITLEY: And in my submission, if
you look at both ends of the range, you can either
9 contract or expand very dramatically.

10

THE COMMISSIONER: Okay.

11

12

13

MS. KITLEY: Dealing, then, with the ele-
mination phase, sir Dr. Spielberg pointed out that
it was any where between 20 and 80 - a half life was any-
where between 20 and 80 hours. He told us for the first
14 time how variable it was and it might be five days
15 to perhaps 20 days for the elimination phase.

16

17

18

I have just reminded you, sir as I did
in the distribution phase, that this vast range of
five to twenty days can never be lost sight of.

19

20

21

22

23

24

25

Dealing, again, with interpretation of
levels, sir - and I am mindful of the fact that my
friend, Mr. Strathy, in the exhibit that he produced
to you, did deal with some of Dr. Kauffman's evidence.
I point it out simply to you that with respect to
interpretation of the levels, Dr. Kauffman had said:



F-13

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

"In order to interpret the blood levels, we need to know two different variables; the amount of drug that was given and the time from the injection to the time in which the sample was taken, and that obviously puts a major quandary on a lot of things that we have to deal with later. Because under any circumstances we have neither the time nor the amount, all we have is the level, and then we are going to have to struggle with where we are at in this kind of complex situation and indeed it is going to be a bit of a struggle, it is going to be a bit of a struggle."

You go to the next quotation at the bottom, sir, dealing with the time dependency and he says in the middle of that paragraph:

"This is one of the major scientific quandaries that we have to struggle with."

If you turn to the next page, sir, I have listed from Dr. Kauffman's evidence the factors affecting the myocardium and serum variability and,



FF-14

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

those, he listed during the course of his examination.

It is our submission, sir, that while in particular cases one can eliminate a particular variable, such as certain counsel taking great pain to eliminate renal failure, and in most cases we can't eliminate all the variables.

The evidence discloses such a variety of confounders and relative significance of one or more cannot be established.

If I can refer you to the next excerpt which is with respect to the "ratio of heart muscle serum concentrations". I am particularly referring to the experts at the bottom of the page where Dr. Kauffman says, and I quote:

"You can make a guess, but it is going to be an average guess with tenfold error."

.....



EMT.jc
GG

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

In my submission, sir, if you have to come to conclusions in your report basing it on something which is an average guess with a tenfold error is hardly the clear and cogent evidence by which you ought to be guided.

If you will turn to the next page, sir, with respect to the effect of agonal events, the doctor is quoted in the second sentence as saying:

"Those are going to be very hard things to look at. They are areas where our data base is very small, some of it anecdotal, but it may have major impact on the ultimate numbers which result."

And the next quote with respect to unbinding he says:

"Basically, again, the number of variables occurring at the time really do not allow one to say much."

It is our submission, sir, that there are so many caveats and so many variables that one must be extremely cautious about the conclusiveness of pharmacological evidence.

Now, sir, at the bottom of that page



GG.2

1
2 I have referred to the calculations which
3 Dr. Kauffman made for us, and I believe he was the
4 first one to do the minimum dose/maximum dose
5 routine. And what I have set out on page 14 is my
6 understanding of the assumptions which Dr. Kauffman
7 was obliged to make in order to do that one simple
8 line at the bottom of page 13.

9 The first assumption, Nos. 1 to 6,
10 he told us about when he initially attended: the
11 weight of the patient, time between administration
12 and death, the extent to which digoxin had
13 distributed into tissues, the extent to which digoxin
14 had been eliminated, the volume of distribution of
15 the central compartment and whether it was a simple
16 IV bolus.

17 He had to make assumptions of each
18 of those. As he indicated, and as I have set out
19 on page 14, the only assumption that he felt any
20 confidence in was the baby's weight because that
21 was stated on the chart.

22 When Dr. Kauffman returned this
23 spring with respect to the Miller child you will
24 recall, sir, he redid his calculation and on a
25 different scenario. And on giving his evidence
about the new scenario it is my submission that he



GG.3

1
2 was forced to make ten more assumptions: whether
3 it was oral or IV, if IV whether into the bag, the
4 buretrol or the line, if in the line, at which point,
5 if in the bag or the buretrol, the ratio of infusion,
6 if in the bag or the buretrol, the amount of fluid
7 into which it was diluted, if IV, the length of the
8 tubing, if IV, the volume in the tubing, if IV,
9 whether the line was flushed before or after the
10 administration, if IV and if flushing occurred, the
11 rate of flow during flushing and whether the patient
12 was on restricted fluid intake.

13 It is my submission, sir, that
14 Dr. Kauffman to come to the time dose and route
15 calculations upon which so much reliance has been
16 placed had to make 16 assumptions, only one of which
17 can be verified.

18 With reference to these very
19 calculations I have quoted from Dr. Kauffman on page
20 15, sir, where he says:

21 "I estimated, based on my
22 assumptions, I estimated that this
23 would have been approximately half
24 a milligram of digoxin. You have
25 to remember that this kind of
exercise carries a great deal of



GG.4

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

"uncertainty with it because we are making assumptions that we have no way of proving or disproving, but if you are willing to accept those assumptions, then we can make some estimates. I think it is terribly important for everybody to understand that these assumptions may or may not be accurate and the estimates then have a great deal of inherent variability."

I then refer, sir, to certain evidence by Dr. Kauffman with respect to fixed tissue and fresh tissue, and I believe Mr. Strathy has referred to these same matters in his so I will not specifically refer to them.

Might I deal on page 16, sir, with the second attendance of Dr. Kauffman on the Miller child? One of the difficulties that each of the professional witnesses had was to come up with a scenario which rationalizes serum and tissue levels, and I simply would like to point out to you how Dr. Kauffman dealt with this on his second attendance, and I am quoting from Volume 139:

"What we frequently find ourselves



GG.5

1

2

3

4

5

6

7

8

9

10

11

12

13

(2)

14

15

16

17

18

19

20

21

22

23

24

25

"doing is trying to fit a set of data into a hypothesis and unfortunately, we frequently find something that doesn't fit and that is commonly referred to as an outlier. When we do that, we try to make judgment then as to whether or not that piece of data that doesn't fit for some reason is weaker than the other data or should be attributed less weight than the other data for some reason so that it is legitimate to disregard it at least to some degree."

In my submission that quotation from Dr. Kauffman is very important. There is no black and white in what they do. They analyze the problem, come to a conclusion that they think is satisfactory, and Dr. Kauffman found it a legitimate scientific exercise to reject the tissue amount.

Now, sir, the next item that I wish to deal with is that of the Atlanta Report, and to the extent that I don't think my friends before me have dealt with it certainly in a way in which I see it, and perhaps this will be something a little



GG.6

1

2

bit new for you over the last couple of weeks.

3

4

5

6

Our basic submission to you, sir,
is that there may be so many difficulties with the
methodology of the Atlanta Report that its
conclusions may be seriously flawed.

7

8

9

10

The report itself has two parts:
the clinical/pharmacological analysis and association
of deaths with Hospital personnel. You will note
on page 17, sir, that I have started with the
clinical/pharmacological analysis.

11

12

13

14

15

16

One of the areas that was canvassed
with the authors of the report was in the context
of expectation bias, and it is our submission that
there is in epidemiological study a risk of
expectation bias and that all steps must be taken to
eliminate or at least reduce it as much as possible.

17

18

Unfortunately in our submission there
is so much likelihood of expectation bias that you
ought to consider it in considering its conclusions.

19

20

21

22

23

24

25

Firstly the authors, the four of
them came to Toronto September, 1982, 18 months after
the death, the last one, occurred. Before they began
their investigation they knew that a nurse had been
charged. They knew there was an allegation of four
murders. They knew that she was discharged.



GG.7

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

The authors were aware of which deaths were under suspicion by the police. Digoxin as a cause of death of these children was in the forefront of their mind. While there are not quotation marks around these comments, sir, we have as carefully as possible given you the substance if not in some places the exact quote.

It is our submission that there is a realistic possibility given this background which is referred to in the introduction to the Atlanta Report that the authors themselves entered into their investigation with an expectation bias.

This problem is in our submission unwittingly exacerbated by the participation of Dr. Kauffman. While his credentials are impeccable and his approach to the task diligent, even he had to acknowledge that an expectation bias may have unconsciously affected his judgment.

Before Dr. Kauffman reviewed the charts, the police told him which deaths were of most interest in their ongoing homicide investigation.

When he was reviewing the charts, Dr. Kauffman spent more time on the suspicious list, and the authors agreed when they were here before you that the advance knowledge which Dr. Kauffman



GG.8

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

had obtained as a result of his engagement by the police was less than ideal for epidemiological purposes.

The next item is that of blinding sir, and it fits in as a separate topic, but I am going to deal with it as well here.

If there is a background of information which contributes to an expectation bias, then the absence of blinding becomes more critical, and the consultants generally speaking were not blinded to the data as to the date of death of patients. The consultants acknowledged that they knew that the problem was murder. At least that is what their investigation was all about, and they admitted, sir, that it was a valid criticism of their methodology.

Now, sir, I have suggested to you that the possibility of an expectation bias can affect what is done, and in my submission it affects firstly the hypotheses that are formulated. I have set out for you, sir, in Nos. 2 and 3, and those aren't typographical errors, those are in fact Nos. 2 and 3 from the Foreword of the Atlanta Report, where you will note, sir, their tasks were to determine if an altered pattern of deaths occurred



GG.9

1

2

3

4

and if there was a relationship between digoxin findings and death to determine how excessive amounts were administered.

5

6

7

It is my submission that if there is a problem with expectation bias, the way in which the job was formulated reinforces the possibility of an expectation bias creeping into the task.

8

9

10

11

Next, sir, under the topic of categorization of deaths, there is a rather vast amount of information. I have just by way of a reminder, sir, set out who did what.

12

13

14

Dr. Nadas, the Cardiologist, reviewed 56 ward associated deaths, and he categorized those deaths from over a three-year period in the topics listed for you on page 19.

15

16

17

18

19

Turning to page 20, sir, I have indicated that Dr. Nadas was not blinded to the dates of death although according to the evidence of the Atlanta authors, the charts were presented in a random sequence.

20

21

22

23

24

25

Dr. Nadas conducted a separate review of 85 operating room associated deaths during a three-year period. For these he was given specific data, not charts. He was blinded to date and patient identifier. He was asked to determine



GG.10

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

the probability of death as a result of heart surgery.

Dr. deSa looked at autopsy findings.

Dr. Kauffman reviewed pharmacologic data and charts for ward associated deaths during the epidemic period and categorized them on Items Nos. 1 to 5 about which we have heard so much.

Dr. Rowe performed a very significant study, Mr. Commissioner. It was he who did a random, allegedly random sample, of 807 patients admitted to the ward during a three-year period, and it is his work, sir, that forms a very important part of the report vis-a-vis the ratios of death before, after and during the epidemic period.

He was blinded as to date and patient identifying information, but could I ask you, sir, to look at Exhibit 141?

If you will recall, sir, this is what Dr. Rowe produced to us during the course of the evidence, and this was a sample of the information that he was given in order to conduct the analysis of 807 patients. He got five or six lines.

As my submission on page 21 indicates he was given age, sex, discharge diagnosis, procedures and diagnostic studies performed.

He was asked, sir, on the basis of

(3)



GG.11

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

only that data to rate the patients with respect to severity of cardiac disease and prognosis of surviving hospitalization, and, sir, I have indicated on page 21 of my submission the standards that he was to apply.

In the course of his evidence Dr. Rowe was asked about Exhibit 141 and his participation in the Atlanta work, and even he said that he was uncomfortable, at the bottom of page 21, sir, performing this exercise because of the limited information given to him.

On page 22, sir, I have set out in some generality some of the tables and figures which the authors of the Atlanta Report themselves constructed. I wish to refer, sir, on page 22 to the report of Messrs. Haynes and Taylor, and you will find that in Exhibit 328.

Now for much of what I intend to do over the next eight pages, sir, I am referring to Haynes' and Taylor's report, and that gets us to the bottom of page 30. Actually to be more precise, sir, to page 28 which are my references to Haynes and Taylor, and you will see in looking through them and I am going to go through them, that in each case in brackets there is a reference to Exhibit 328 and a page number.



GG.12

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

During the course of their evidence
the Atlanta authors were aware of this report from
Haynes and Taylor and it has obviously been made an
exhibit.



1

19jun84 2
HH
RDrc 3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

To be quite fair, sir, I wish to refer to Volume 92, page 677 - and I omitted to ask the Registrar to get it out for you.

THE COMMISSIONER: I have it.

MS. KITELY: It isn't very long, sir. It is just one page.

THE COMMISSIONER: I think we will just survive with your reading of it.

MS. KITELY: I am looking at page 677, where Mr. Roland is on his feet and there is some discussion about the Haynes and Taylor report.

You, sir, or Mr. Roland indicated that the Atlanta authors had known about it since October or November; they had had a draft of Haynes and Taylor, and you interjected, you asked whether there ought to be equal time between the Atlanta authors and Haynes and Taylor. You said:

"I wonder if you could do it within a month, if you could let us know within a month if you take any issue with that, you can let us know by letter or any other form."

Dr. Buehler asked to speak with his attorney. It was there that some discussion, both on and off the record, about whether or not he would



HH2

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

let you know within a month. I have to be fair to say that it isn't clear that he said he would let us know within a month, but I have spoken to Miss Thomson as recently as this morning, and she advises me there had been no communication from the Atlanta authors one way or the other.

THE COMMISSIONER: That is not quite correct. That is not her fault. We did get a letter which was pretty inconclusive. It is the sort of thing that we are still investigating.

Miss Cronk, you have seen that letter.

MS. CRONK: I will look into it, sir. I don't now recall the final disposition of it.

THE COMMISSIONER: I have seen it. It wasn't one that would have been of infinite value to the Commission.

MS. KITELY: Or we would have heard about it.

THE COMMISSIONER: So nothing has been done about it. It sits around somewhere because I have definitely seen it. It was merely -- I think it was from the two doctors here saying that it was received and they are working hard on this problem; that sort of comment. I am not fair to them - they



1

HH3

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

said a lot more than that, but that is the gist of it.

MS. KITELY: The position that I am taking, sir, is that the authors have been given an opportunity, whether it is clear on the transcript that they were to give that within a month or not --

THE COMMISSIONER: I think they did concede to one error, did they not? They put in some babies twice.

MS. KITELY: That is right, they did. 40 odd babies were put in twice.

What Haynes and Taylor did, they took them out and they redid the information. In my submission, the Atlanta authors conceded to a little bit more than that --

THE COMMISSIONER: Yes. All right.

MS. KITELY: -- in terms of their methodology throughout the course of their evidence.

It seems to me, sir, that one of the easiest ways to deal with this evidence is to compare Haynes and Taylor with the Atlanta Report, and I am mindful of the fact that Haynes and Taylor was not dealt with in some detail and it is not my intention to simply repeat the 40 odd pages of Haynes and Taylor. What I have tried to do, sir, on the



HH4

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

next number of pages is group together the objections or complaints of Haynes and Taylor under the reference study and, so, sir, if you would have the Atlanta Report with you and Haynes and Taylor, I can show you what I have done. I don't intend to drag you through each of them. I just want to show you the process that I have adopted.

THE COMMISSIONER: Yes. All right.

MS. KITELY: If you will look at the Atlanta Report, sir, you will note, when you get into the real work, that if you look on page 5, there is a reference to mortality rates. If you will look, sir, in Haynes and Taylor on page 1, they have a four or five-page introduction, but on page 1 you will see the same heading - "Mortality Rates". What Haynes and Taylor very kindly and consistently did was, they dealt with the same subject heading as did the Atlanta authors and, hence, it makes for much easier reading than otherwise.

What I have done, sir, is I have taken from Haynes and Taylor certain of the comments that they make and I have grouped them under the respective table or figure, as the case may be.

Now, Mr. Commissioner, I don't know that I can finish this part by 4:30, and Miss Cronk



HH5

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

has indicated that she would like it, if possible, that I not go beyond 4:30. I know that I am in your hands, and I know that Mr. Lamek is standing in the wings. I would, if possible, like to do this next session at one shot.

THE COMMISSIONER: Yes. How long do you think you will be, all told?

MS. KITELY: I would say another hour, sir.

THE COMMISSIONER: Yes. All right. I don't know who was participating in some other room.

Mr. Shanahan, surprisingly, you are the representative on the families.

MR. SHANAHAN: Mr. Roland isn't going to be here tomorrow. I think Mr. Tobias is away, but I have got an estimate that he was going to be somewhere in the range of two hours, two and a half hours. preparing.

Mr. Labow is away/ He is going to be two or two and a half hours. Mr. Shinehoft, I think, is going to be an hour or an hour and a half.

There you have it.

THE COMMISSIONER: You left out --

MR. SHANAHAN: I will be half an hour to an hour.



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

HH6

THE COMMISSIONER: All right. That will probably keep us going. I was just really wondering whether we should come early tomorrow, that is all.

MS. KITELY: I am prepared to do that, if you wish, sir.

THE COMMISSIONER: Why don't we make it a quarter to ten tomorrow instead of ten o'clock. That will make up for our treating this afternoon.

All right, quarter to ten tomorrow.

MS. KITELY: Thank you, sir.

--- whereupon the hearing was adjourned at 4:20 p.m. until Wednesday, the 20th day of June 1984, at 9:45 a.m.

